

SEQUENCE LISTING

<110> Sun, Yongming
 Recipon, Herve
 Salceda, Susana
 Liu, Chenghua
 Turner, Leah

<120> Compositions and Methods Relating to Breast Specific
 Genes and Proteins

<130> DEX-0249

<140>

<141>

<150> 60/243,802

<151> 2000-10-27

<160> 282

<170> PatentIn Ver. 2.1

<210> 1

<211> 207

<212> DNA

<213> Homo sapiens

<400> 1

```

ggaggagacg tgcaatagag atacccaaag aaatacatga ataattcagg agcagatttg 60
catttatcca ctggtactat ttagttgtat ttattagaca gcttcctgcc ctctccaaaa 120
agcttactga gctagtaact atttacaggg ttagccaaag aacacaaaaa agtgatctct 180
attagactgt aagaatatgg tttccct                                     207

```

<210> 2

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (492)

<223> a, c, g or t

<400> 2

```

ggttgatatt atattacact tctctgaata aaatgccacc ttgatttgct cattctcaat 60
cggcaggagt cttatttcac ctctgtaggt cttactaagt gtgtttagtt ttcaaaagaa 120

```

```

accagtgttt ccctagtact taacatgggt ttattacatt tttttgacaa aaattcaaaa 180
ttacatatat tttgttcttc attagcaagt cacacatttt aaaatggcac actcccttcc 240
tcttcgtgtt gttatttggt tattttaagg actgtttctg ggtagataag ctctgggtta 300
ttttaaaata cattttacaa tggaaatggc ctggacttga actgaaaagg aaacattatc 360
tgtgttatTT cagacacatc agtgatcagt ttagaagata ggatgatttc actaagctta 420
taattcatct taaagctcac ctaaataaaa gtaagtgact aaaatgatct ttttcttcca 480
ggagaggtag gnttaattaa ttg                                     503

```

<210> 3

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3

```

ggttgatatt atattacact tctctgaata aaatgccacc ttgatttgct cattctcaat 60
cggcaggagt cttatttcac ctctgtaggt cttactaagt gtgtttagtt ttcaaaagaa 120
accagtgttt ccctagtact taacatgggt ttattacatt tttttgacaa aaattcaaaa 180
ttacatatat tttgttcttc attagcaagt cacacatttt aaaatggcac actcccttcc 240
tcttcgtgtt gttatttggt tattttaagg actgtttctg ggtagataag ctctgggtta 300
ttttaaaata cattttacaa tggaaatggc ctggacttga actgaaaagg aaacattatc 360
tgtgttatTT cagacacatc agtgatcagt ttagaagata ggatgatttc actaagctta 420
taattcatct taaagctcac ctaaataaaa gtaagtgact aaaatgatct ttttcttcca 480
ggagaggtag gattaattaa tggataatg tgtggaatat ttcaggctta tctgattctt 540
ccatcttaaa tctttgagag ttttaaacac attatgtgtc cattactgtt tatatcacat 600
aga                                     603

```

<210> 4

<211> 534

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (133)

<223> a, c, g or t

<400> 4

```

gaaatgcagc tgacaatgca aggagcaaga ggactcgcac agtgggtgcat ggcagcttgc 60
tgtcattttc tgggcacaga aagtgcgatg gaagggaatg agaaggggaa aaaggaagga 120
tgacaggacg ganggagggg aagaagggaag aggaaaaaag aaaggacagg agaaagggag 180
gaaggcttct gccaaaaaat taaaatcaaa tttttgacat tctttttgtt tgcctttttt 240
gaaacaaaat gacacttgcc agacaccagc ttcttggtcc atgtcctggt ccttggtatc 300
cagatgacag cagtgtgatc ctgctgtgag ttcttccgt gccttctgat ctgagttcct 360
gaaagcagag agccactcag gaactgctgt ctctcaggcc agctggctgg tgatgggctt 420
ttgaagactc tggctctctc tcctgctgga agagctcccc aggggccacc aggagccagg 480
tgaccgctct cagcctctgt gagctactgg agatcaccag accttcccac atcc          534

```

<210> 5
 <211> 928
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (329)
 <223> a, c, g or t

<400> 5
 atgactctta acgagcatgc tgccttcaaa catctgttta acgaagcaca tcttgcaccg 60
 cccttaatcc atttaaccct gagtggacac agcacatgtt tcagagagca cagggttggg 120
 gcactgtgcc agacactgga gataataaag aaaaacagca ctgggcctat aattgggagt 180
 ctagatatac gatatggaaa tgcagctgac aatgcaagga gcaagaggac tcgcacagtg 240
 gtgcatggca gcttgctgtc attttctggg cacagaaagt gcgatggaag ggaatgagaa 300
 ggggaaaaaag gaaggatgac aggacggang gagggaaaaga aggaagagga aaaaagaaaag 360
 gacaggagaa agggaggaag gcttctgcca aaaaattaaa atcaaatttt tgacattctt 420
 tttgtttgcc ttttttgaaa caaaatgaca cttgccagac accagcttcc tggcccatgt 480
 cctggctcctt ggtatccaga tgacagcagt gtgatcctgc tgtgagttcc ttccgtgcct 540
 tctgatctga gttcctgaaa gcagagagcc actcaggaac tgctgtctct caggccagct 600
 ggctggtgat gggcttttga agactctggc tctctctcct gctggaagag ctccccaggg 660
 gccaccagga gccagggtgac cgctctcagc ctctgtgagc tactggagat caccagacct 720
 tcccacatcc cgggcagggtg ccagggcctt taaggaggct ttctgctctg cagggatgtt 780
 ctgtgggctc cagtattctg gcgagcatca gcttattctc ggcttagtct tcttgctcta 840
 tagctcctgc ctctgttttg cttctttttg gtgatgcctg tttcacctta tgaagagggc 900
 ctgtaaaatc caagctctgc acaaacc 928

<210> 6
 <211> 368
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (305)
 <223> a, c, g or t

<400> 6
 tattaagtga ctttaatgta agttaccac ttctggtgct agtttgtatg ttaatttgtt 60
 tttatcctga tacatataat caggtagaat tgggaatttt attcagcctc cgcgtcgggg 120
 aacatagaat aactctttat tgactcaaga ctggaatttt cagaaaagt taaattttta 180
 ttttttctag aattttcaga aaagtttaat agatctgaga cattttttaa tcttttaatc 240
 tttctagcta tttgtgaata tgcttttctt cctttttaa ataatataata gctgggatgt 300
 aaganagcta ttgatgcata tttttatttg gatattctat tgaactctta attggaataa 360


```
actattatat ccatttattt aagttctaag agactataact gcctaaaaaa atagagttga 120
tcttagtcaa atcacttaaa tcaggaacct ttaagattca gtttaatcag ttttgtatat 180
aaagtattag acttactttc accatttttg cccaaaaaca aacttctgta cttcattaaa 240
taacatcaac aaaagtaaaa agctaacatc aacctaggaa aaccattttc accgtaacag 300
ttatgtatat taactatatt atatactttt aaattagtaa aaaaaagggt aaaagacatg 360
aacaattatc aaaggaaaaa aatcctgaaa tattcaaagt ttacacctac taaaggaatt 420
cttaatctgc tgattatggt tcttaattgt accatgaatt acaaaaacct attggcaaga 480
tcagtcttat ttaaaaaaaa aa 502
```

```
<210> 10
<211> 390
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (83)..(211)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (214)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (300)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (304)..(324)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (368)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (381)
<223> a, c, g or t
```

```
<400> 10
cacatatatc cagtaacagg gctgtgctgt taccctctaa atctacaaaa ataaaaagtc 60
ctcaagtttg acttattggt tannnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
```

```

nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 180
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nacnctgatt cctttctgga gactctaggg 240
gaatctctttt tcttgccctt tctggcttct agaacctgcc tacattcttt ggctagtggg 300
ccnnnnnnnnn nnnnnnnnnnn nnnngtggtt ggctcagtct tctctgatgt tatctttctg 360
gttctgancc ttccatctcc ntcttcgcca 390

```

```

<210> 11
<211> 266
<212> DNA
<213> Homo sapiens

```

```

<400> 11
cttcagtggg aagagttctc atattaaatt gaattggtac ttaagaaagg gctttaacta 60
ggcaaaacct tgggagtttt gaggtccctg tggacttgcc tggcatgcct gggagatttg 120
taggtatctt ctttctacac ggattgtgtt tctgccctca aggaaaatag ttcactttga 180
ccactgtaaa tgatgtagta tttaacaaa aggaaaagca cttcattgtc tgctctaaaa 240
ctaaaatggt aagaaagaga ggtggc 266

```

```

<210> 12
<211> 380
<212> DNA
<213> Homo sapiens

```

```

<400> 12
tgtcatggga agtggcggcc actgccacat ctgctatgag gctcttcgcc atcgttggct 60
gctggaaatt tggatacagt aaatggtata taaggcttct ttttgcttgt gcaccagaag 120
tctttgtccc agcctccaga tcagcagtca gtactccctc ctcccaacct gtaggaagta 180
cttgtgaaaa gttatctatc cctgggtctga gtgggagggt cttaacctca ttgatgtttt 240
agtgtgactt gtctacattt gtgtgctccc ttcgtcatct gcagaggata tgagaaaaga 300
aacaatgaa caaaaagtgg agatagcgcc ttcctattca ttcttcattt ggtatggtta 360
tagttaagag aggtgagcca 380

```

```

<210> 13
<211> 871
<212> DNA
<213> Homo sapiens

```

```

<400> 13
tttttgctaa gacaagatct actttgtcac ccaagctgga gtgtagtggc gcgatcatgg 60
ctcattgcag cctcgggtct ccaggtcaa gcaatccttc cacctcagcc tccagactag 120
ctggaactac aggcgcatat caccaagcct ggctaatttt ttaattaaga cagggctctac 180
tatgtggccc aggctgggtc tgaactcctg gactcaagca attctccac tctggcctcc 240
caaagtgata ggattacagg catgagccac cagcccagc ctggctcacc tctcttaact 300
ataaccatac caaatgaaga atgaatagga aggcgctatc tccacttttt gttcatttgt 360
ttcttttctc atatcctctg cagatgacga agggagcaca caaatgtaga caagtcacac 420

```

taaaacatca	atgagggttaa	gaacctccca	ctcagaccag	ggatagataa	ctttcacagt	480
acttctacag	ttggagaggg	agtactactc	tgatctggag	gctggacaaa	acttctgtgc	540
acaagcaaaa	aaagcctatt	accattacct	gtatccaaat	tccagcagca	acgatggcga	600
agagcctcat	agcagatgtg	gcagtggccg	ccacttccca	tgacaaaggg	aggtaggcat	660
gattcatctc	tagtgcatgg	ggacgggttg	cttttgcccc	aatcaactc	aagaccctt	720
tccaccatat	gtctgtatgt	aactctaaat	gcctctctaa	gacttaagaa	taaaaagcca	780
ctgctacctg	gcaagtggat	gaggcaaaag	agaagacata	ccccaaagaa	ctatagcact	840
ctgctccaaa	ttacagaact	ttctaaacgt	c			871

```
<210> 14
<211> 411
<212> DNA
<213> Homo sapiens
```

<400> 14							
gaacaaacct	ggaatattgt	gaactattga	tgacaatgct	ttgagggcat	ctttggaaac	60	
caaaatgtaa	atataactaa	ttattttttc	acttattgtt	agcatttagt	attttatgca	120	
taaaaacttt	tttaccaaat	aaatttttga	agtttaaatt	ccacaaatga	tactaatgaa	180	
agtataaatc	atttttgggt	gtttttttaa	aaattatgtt	tcaatctgtc	attattggaa	240	
taaagtgtat	aaactgcatg	ttataaaacg	gctttacaca	tatataactc	atgaactcaa	300	
gagaaataat	atttttagga	aagaagagta	tctctagatt	tttaataata	attaaatttc	360	
tttaaaagac	tgaagataga	aaagagaaat	taaactatgt	attgacttaa	t	411	

```
<210> 15
<211> 737
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (657)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (709)
<223> a, c, g or t
```

```
<220>  
<221> unsure  
<222> (716)  
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (721)
```

<223> a, c, g or t

<400> 15

```

atcaaacaag gcaaggagaa ctcaagaaag tctggtcact tcagtgagtg ttggtgtgtg 60
aggagaatca agtgagaagt gcttttagaa acatccatgc aggtatgaag gagctctaac 120
atgccagggtg agtggaacaag gcttggggaa ggttgacgat acctagagac atgtcagcct 180
ttgggtcaga gcctgcctaa tctcatgggg aactgatggg tggaataggc actctaggct 240
ccccctggca tgggcagggt tgcagagaaat tcagaaattt gtgtgtgttc acggagggga 300
ggccaagctt ctgactgttg aagttagggt cagaatggag aggccagcat gtgtgtgagg 360
gactctgaga tgggaggctg acaattagga caatgggctt tgcccatgga gccagaatgt 420
taccctgcga ggggtgaatgg cactgggcca catatctcag tggtcagatc caggatctca 480
gcagtcactc ctatcaatca gagatcggac catggcaggc aactcagca aagtccccca 540
tgatccagaa gacatgtgcg aattctgcat catcttcccc tccataatcc tgaggacagt 600
gagagccaag gtaaggacct tgacacacag attcgttacc aggaggaatt ctttgcntac 660
tgaatcattc tgaatatatc ggatttgtct aaatagatcc cacctgcctt cccatntact 720
nttctccagt aaagagg                                     737

```

<210> 16

<211> 1082

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (90)

<223> a, c, g or t

<220>

<221> unsure

<222> (1002)

<223> a, c, g or t

<220>

<221> unsure

<222> (1054)

<223> a, c, g or t

<220>

<221> unsure

<222> (1061)

<223> a, c, g or t

<220>

<221> unsure

<222> (1066)

<223> a, c, g or t

<400> 16

ttatgggtag	atattatgat	gacgtatata	ttctacagat	ggagaaacta	tgacctagag	60
tgacccaat	gtcaccagct	aagggtgggn	ctgggtttaa	accaggccag	tctagcttgt	120
aacctctatg	tcatattgga	atagactcta	gcacagtgg	tatagggtcc	tactaaaaga	180
gtgttaaaac	catgacagct	atgctttaag	aatacatact	tgaatgtaag	tgtagccct	240
gacatccaat	ttgtcttcct	aacgcctagt	atataatatg	gtcaagaaa	tgttatttaa	300
atatgtgttt	catttttttt	ttcttttttg	agatggagta	tcaactctgtc	accaggctg	360
gagaactcaa	gaaagtctgg	tcaattcagt	gagtgttgg	gtgtgaggag	aatcaagtga	420
gaagtgcttt	tagaaacatc	catgcaggta	tgaaggagct	ctaacatgcc	aggtgagtgg	480
acaaggcttg	gggaagggtg	acgataccta	gagacatgtc	agcctttggg	tcagagcctg	540
cctaattctca	tggggaactg	atgggtggaa	taggcaactct	aggctcccc	tggcatgggc	600
agggttgtag	agaattcaga	aattttgtgtg	tgttcacgga	ggggaggcca	agcttctgac	660
tgttgaagtt	agggtcagaa	tggagaggcc	agcatgtgtg	tgagggactc	tgagatggga	720
ggctgacaat	taggacaatg	ggctttgcc	atggagccag	aatgttacc	tgagaggggtg	780
aatggcactg	ggccacatat	ctcagtggtc	agatccagga	tctcagcagt	cactcctatc	840
aatcagagat	cggaccatgg	caggcacact	cagcaaagtc	ccccatgatc	cagaagacat	900
gtgcgaattc	tgcattcatct	tccctccat	aatcctgagg	acagtgagag	ccaaggtaa	960
gaccttgaca	cacagattcg	ttaccaggag	gaattctttg	cntactgaat	cattctgaat	1020
atatcggaatt	tgtctaaata	gatccacact	gccntcccat	ntactnttct	ccagtaaaga	1080
gg						1082

<210> 17

<211> 128

<212> DNA

<213> Homo sapiens

<400> 17

```
gtttttgcaa ataagagcac taaaaagact aaaccattcc tcggtgcctg gaagaggctg 60
tttgcathtt agttaccctg ctgttcataa catctctaag aaaatgtagg ggccaccctg 120
ggcgcagt                                     128
```

<210> 18

<211> 465

<212> DNA

<213> Homo sapiens

<400> 18

gaaggagaga	gtgagtgagc	aatgactga	aagcagccag	cattgccggg	accctgccgc	60
atctcatact	gggtgctgca	caggcagcgt	tcctcctctt	gtggcgcttg	ggaaatagac	120
attaatcaca	cacaaacaaa	aacgatggca	aattgtaatg	agggctatga	aaggggagtga	180
agggcaagat	cactgagggg	tgggactcag	agaatcctt	tctgaggaca	tgacctgtca	240
gctaagacgg	aaggaggact	tcagttaga	gaacaagtca	attaatactc	cgtggcctct	300
tccactcact	ctcatgaatt	tgccaagtgc	cctggggaga	atggggcctg	aactctggac	360
cctgaggtct	ttctccatgc	actgaaagca	gccccccag	ccctgggccc	ctccctgcga	420
cttggtgact	tgactgcctt	attctagcat	catggaaaac	acatg		465

<210> 19
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 19
 gtaaaaagga aatttgttgt cattctgttg aatagagtga ttaagcagct tgcctaaact 60
 cccccagaca gggatgcagt tggagctaga aagttaaccg aggcctggct gacaaggcct 120
 cattctccat cagctggtca aaggaacagg agctctgcat cctgtcctgc tcagtagagg 180
 aggaaaggag acagctcctc cgggaaatct agaggaattt gcattctctg cctgagctgg 240
 cttggggcca gctttgtgga atcctgggtgc cagttctttt tctgcttcag gggctatttt 300
 ttaaaaaaat cagtagttac attttatgtt taccaataga tttatatagc aaatgatatt 360
 tgttttttat ttaaagccac aatatcaagt gtctttttta aaatataaat aataatcctc 420
 atggtatgca gatgtagcag aaaattgtgc aggtggtatg tgggcaactg gatttgggga 480
 aatgctgctg catgtcatgc actctccata ggtaggtttt cccctttatt tctccctc 539

<210> 20
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 20
 gtaaaaagga aatttgttgt cattctgttg aatagagtga ttaagcagct tgcctaaact 60
 cccccagaca gggatgcagt tggagctaga aagttaaccg aggcctggct gacaaggcct 120
 cattctccat cagctggtca aaggaacagg agctctgcat cctgtcctgc tcagtagagg 180
 aggaaaggag acagctcctc cgggaaatct agaggaattt gcattctctg cctgagctgg 240
 cttggggcca gctttgtgga atcctgggtgc cagttctttt tctgcttcag gggctatttt 300
 ttaaaaaaat cagtagttac attttatgtt taccaataga tttatatagc aaatgatatt 360
 tgttttttat ttaaagccac aatatcaagt gtctttttta aaatataaat aataatcctc 420
 atggtatgca gatgtagcag aaaattgtgc aggtggtatg tgggcaactg gatttgggga 480
 aatgctgctg catgtcatgc acctctccat aggtaggttt tccccctta tttctccct 540
 cttttcagca aaactctccc ctctactttc cactgaaaa atagcatggt gagttaaact 600
 agttagtctg atcatggtgt gggcatggtg gttgggttag a 641

<210> 21
 <211> 406
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (379)
 <223> a, c, g or t

<400> 21

```

ctggtagtca ggggcaaact caggccagaa cccaagtctc ctgactacta ttccagtgtc 60
ctttccaccg tgctctggaa gaatacggca caagcataag agcgtagtat tcatccctgt 120
acattcatgc agccagcctt acctagagtc acagtcaatt gtggccaact tggcaagatt 180
tgaacatcac tgataagcaa tctttctctc aatgctgcat ctctccagct tgttctttcc 240
ctaccatccc ccacgtatga cttaaagttat agcattgact gaaatctttg ggattaaagc 300
cctgtgatct gactgagaaa aacctgttga gccattacct acaatttaca caaacaaatt 360
tcttcgattt gtcttttang gctggcccga aggcatctac atttga 406

```

<210> 22
 <211> 467
 <212> DNA
 <213> Homo sapiens

```

<400> 22
cagacagaac agatagatag aagaaaagaa aagggtcact tggcactagg tcttcacagg 60
taaagattca gagtgtgata ggaagcacag gctcaggcac ccgggtctaa tcaatgacaa 120
tctcgcttct aggccttttg gtggcatttt ctagtctacc tctaagctct agggaaatcgt 180
gtggctaaaa tcttcctctc tgctgagact cagagaatac catgttggcc aagatctcta 240
aaacaatcaa acctggcagt attgagttac cttcctctta tcataaagtc tttcctcact 300
tctccttat tgtgaacttt ctttaagaagt gagtccagga ggaagcagtg acatgaattt 360
attaacttga ctcagacttc taaagacaac acaaactggg cgccccattc agagagtga 420
agggaaaccc cgtggcataa ttagttacta cgagtttcca aatagga 467

```

<210> 23
 <211> 1328
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (300) .. (472)
 <223> a, c, g or t

```

<400> 23
gcacagattt agccttggta tttttttctg ggaagtataa aagacttttg tgttctgtct 60
ttttgttttc aatttctctc tagaggaatt taaaaccgga tatttccatc ttaaagttct 120
tgagcaagtc tgtcaagggtg tccatatttc ttaccctgtt cctctcagca tcgaagtgtc 180
atctctgtta cactcatgtt tgctgttcac aatggagtac taatgaaata gcaaaattaa 240
gctaccggca tgggtgcta aactgaaact aaaaatcggg ttggagcttt tctgtttggn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnaagaaaag 480
aaaagggtca cttggcacta ggtcttcaca ggtaaagatt cagagtgtga taggaagcac 540
aggctcaggc acccggtct aatcaatgac aatctcgctt ctaggccttt tgggtggcatt 600
ttctagtcta cctctaagct ctagggaatc gtgtggctaa aatcttcctt cctgctgaga 660
ctcagagaat accatgttgg ccaagatctc taaaacaatc aaacctggca gtattgagtt 720

```

```

accttctctt tatcataaag tctttcctca cttctcctt attgtgaact ttcttaagaa 780
gtgagtccag gaggaagcag tgacatgaat ttattaactt gactcagact tctaaagaca 840
acacaaactg ggcgccccat tcagagagtg acagggaac cccgtggcat aattagttac 900
ctacgagttt ccaaatagga tttggaagga gacatacaac taggtcgccg gcgtggcaca 960
tggtctccct gaagccagca ttgcctggcc aaggaagctt tgcagaacag atgagatttc 1020
agctgggact tgcagccaag tgggatttgg ctttttgggg agaagggaaa gggcattcaa 1080
aggccaggga cagagtatgg tcaaaggcat ggagatgagg aagaggggac cagagcagag 1140
ggtcagggtt gaaagcgagt tgggggtcaat ctgcaaagg gctgacgtgc caggtaaaaa 1200
acaggagcac cgttttagttt tgtcggatca tttcaggtgg aagggcagtg ggaatgttgg 1260
agaaaacact ttttggtgtc gttacattga atctgctcat ctataagaat aaaactttat 1320
ttcataga                                     1328

```

```

<210> 24
<211> 550
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (352)..(371)
<223> a, c, g or t

```

```

<400> 24
ctcatacctc ccctggtcca gatcatgatt caggtctttg ttctaggatt cctggcttat 60
tatctggttt atttcaataa caaggacaat aagtcatggt tatgattttt ctgtttcatg 120
gagtgagtga acattttatc tcattccagg aatttggttt tttccaacta ttgttgcttt 180
ttgggttggt tttaaataatt cctttaccaa gaaattcatt cattagtcta cattttcagc 240
tttattagca taggagtctt aataacattt tgtgtatggt ttcatacact agtgattggt 300
tgctaattcc tcaccttttc ttttaggtcac tgttctttat acattgggta tnnnnnnnnn 360
nnnnnnnnnn ngcatttaag tttttacttt ttatgagaca aatgtatttg cgttccatag 420
atgtcagtta gaaatgtttt caacatcatg gttctctaca aactttgtga tttcagttac 480
atttccacat tgactcaaca gttattttaat agtgagctct ttttttttta agacgtagtc 540
tgactctggt                                     550

```

```

<210> 25
<211> 150
<212> DNA
<213> Homo sapiens

```

```

<400> 25
gattcagccc gtgatccttg actggatcct gggtgaaagc aaaagcagct ctaaaggaca 60
ctttgcagac taaatgttag ctaacaccat tgtatcagtg agaaagtgca gagtgtgggt 120
agtccattga ggctctgtag aagaaagtcc                                     150

```

```

<210> 26

```

<211> 192
 <212> DNA
 <213> Homo sapiens

<400> 26
 aaaaagtcaa tgtcataaaa gacaaagaaa ggctgaagaa gtgattcagc ccgtgatacct 60
 tgactggatc ctgggtgaaa gcaaaagcag ctctaaagga cactttgcag actaaatggt 120
 agctaacacc attgtatcag tgagaaagtg cagagtgtgg tgagtccatt gaggctctgt 180
 agaagaaagt cc 192

<210> 27
 <211> 747
 <212> DNA
 <213> Homo sapiens

<400> 27
 gagctttgca gggatttagc ttttctcagg gccacctgcc ctcaggettc ctgggccctc 60
 atacttcttc ttgtttatat cttatctgcc tttgggggaa tgaccttaga ggaattgggtg 120
 tgagtaagcc atgaggttct tgggtccacct ccatccagcc aagggcagct ggcagctggg 180
 cacttacatc cagcaaggca gaagcaaccc tggctttgaa gtcagactgc tagggtgagt 240
 ctgaatggcc tcgggggaaag ttccctctga gccttcgttt ttttcacttg tgaaggcgat 300
 agtctcgctt agcttgaggg tttatcaggg ggattcagtg agaacctcat ttgaagcagc 360
 tgcttttagtt cctaacacct aataaatggt taaccactta ccctcctctc ccaccacct 420
 ttcaactttg aacctcttcc tccatgtcat cccttcttaa ggcgctgacc ttttgccac 480
 aaagaatggc tctttttgtt cccatcagga ctagaattct tatctttttg ttgcttggcc 540
 ctggtaatca aagaaccacc aacacatttg caaggcatct ccagccttct cgttctggcc 600
 gccctctctt gtcttaggga gagtgctata ctggcatggt gatgagatga acgaaagggc 660
 agtctctggc tgttttctgc tgatgaggat gtgctgagca gcctcctgca aatgagaagc 720
 agggaaaaga ccaaactagc ttagctc 747

<210> 28
 <211> 184
 <212> DNA
 <213> Homo sapiens

<400> 28
 taagctcggg attcggctcg aggcattgcca gtctttgggg catatggatg gtggatgtgg 60
 cttgcctttt caccctctga cattgttgat gagcagaaac ttccaatttt gatgtagtcc 120
 acaatattaa tatttctcat aggccaccac acccagccta tgttatcttt tagaagcttt 180
 attg 184

<210> 29
 <211> 217
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure

<222> (97) .. (161)

<223> a, c, g or t

<400> 29

ctcaattatt	ctaggaatct	atgctgaata	tgcctctaac	aatacaaaatt	atgtattact	60
taatgttatt	aattatagta	ttattttaatt	tgcgaannnnn	nnnnnnnnnnn	nnnnnnnnnnn	120
nnnnnnnnnnn	nnnnnnnnnnn	nnnnnnnnnnn	nnnnnnnnnnn	ntagccatat	aatggagtac	180
catgcagata	aatcagaaaac	tagagattgg	ttacctg			217

<210> 30

<211> 543

<212> DNA

<213> Homo sapiens

<400> 30

tgaggaagcc	tgaatgggaa	tgaaaaaacaa	ataagaatca	aaagcagagg	gctgtgtctt	60
ttattttttgt	attcttacac	cgtatgaact	ttattaagaa	ctaaaatcat	gtgatggtaa	120
cccatgggca	cacgctgagt	acaaagttag	aaaattgtac	cagcatcatt	aactgggggt	180
gcttttgtgt	aacatttgtt	atcattcaca	gatgtcaaca	ataagagaa	acatctctct	240
atatataatt	gttacaaaca	ttttaaat	taaggaaaag	aaaaaaaaag	atgcaaaagt	300
tcaaagacta	aactcacaa	atcctaccga	cagagaatac	ttaggatagc	taagatctca	360
gtgttcattc	aaacttctaa	actcaaagac	tcggaattat	gcaggaagtt	gaacatgtct	420
tgtgtcacca	gatctgtcag	tgaagctgat	tatagtcttg	ggataaaatt	gagagtaatg	480
tgacagtggg	ctgggaactc	tgactgtggg	ctctgccctc	tggatgcaga	gactccaagg	540
cac						543

<210> 31

<211> 283

<212> DNA

<213> Homo sapiens

<400> 31

gcttcaagct	tctgtctctc	ctcttttgcc	atattattga	gcctggaatc	tgagtgggag	60
aggacgacag	aggggtctggg	cacaaggaag	ccattgattg	aggccattac	tgcaatcaac	120
ccaccaccaa	taaaaagcac	tggaggagag	ggcttgacat	agacacaaaa	cataaaggaa	180
gggggtgaaa	ggaaggaaaag	agattgagga	aaaaaaataa	aaataaaaaga	tggtctgggta	240
aggggaagaag	agataggggaa	gagagacaga	aaaggtagaa	tgc		283

<210> 32

<211> 418

<212> DNA

<213> Homo sapiens

<400> 32

```

aaaaaatcct tcattgtgtct tgtatacatc tgcagaagac cagtagtgta cattttcttg 60
gctgtagcaa ggggtccaaga aaggaagtag taagcagttt ttcaagtctc tctctctctt 120
tttttatatt gttggcttca atgcttcctg ctctcctctt ttgccatatt attgagcctg 180
gaatctgagt ggggagaggac gacagagggg ctgggcacaa ggaagccatt gattgaggcc 240
attactgcaa tcaacccacc accaataaaa agcactggag gagaggggctt gacatagaca 300
caaaacataa aggaaggggg tgaaaggaag gaaagagatt gaggaaaaaa aataaaaaata 360
aaagatggct gggtaaggga agaagagata gggaagagag acagaaaagg tagaatgc 418

```

<210> 33

<211> 172

<212> DNA

<213> Homo sapiens

<400> 33

```

cagactggga ctctggaaaa tcctaaagca ttatagaact tggggcttgt cctttgactt 60
catgggtttt aaacccagca tggtgacca gtagtgggct gtccaatcaa ctgagctctt 120
gaaattggaa tagaataaaa tagaaatat agcatattcc catctataga aa 172

```

<210> 34

<211> 128

<212> DNA

<213> Homo sapiens

<400> 34

```

ggcctccgat tgtccacacag ttagttgttc ctcgaggga cccctcctgc tgctccttgg 60
atactccagg ggccgaggag ccgagactca ctggagtgtg ggcatggcca tccagagagc 120
tctgatca 128

```

<210> 35

<211> 619

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (128)..(416)

<223> a, c, g or t

<400> 35

```

ggcctccgat tgtccacacag ttagttgttc ctcgaggga cccctcctgc tgctccttgg 60
atactccagg gccgaggagc cgagactcac tggagtgtgg gcatggccat ccagagagct 120
ctgatcannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240

```

```

nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 300
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 360
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnngctt 420
tggctctttgg gggttgctga aaaagcaaaa ccagggtctgt ggggtagaag gcgccctggc 480
cacacacagg cattgccgcc tctgggggtcc gcagagtcctg tgtgacaacc tggtcactcc 540
gatctagcag cgtatttgaa tgaatgagtg acagcttaat gaagtagcca agtaccttga 600
tttgaacgta ggagccggg 619

```

```

<210> 36
<211> 356
<212> DNA
<213> Homo sapiens

```

```

<400> 36
cgacagataa gtcagatatc gaatatagac attaaaagat ctgggggcact aggctgtacc 60
ctgttattgt cagtggctct ttagtcctta aacaagggtc ttgcctccta cttttttttt 120
gttatggtag aaataaatgc ccaccgaggt tttcatcact cactattatt ctatcttttg 180
tgtgcctgta ccatgttccc ttaacaatcc tcaattatga aacatttagg cagtttataa 240
acaatactgc aatgaacaac ctagtgcata ctttttttgt gtgttcttct tttattatct 300
cctagaagtg agccctagaa atggagttcc tgagtcaaaa tgacacattt tatagc 356

```

```

<210> 37
<211> 158
<212> DNA
<213> Homo sapiens

```

```

<400> 37
aaggaattag attccacatc tcaatctaag gagcagcaca aatatgcaga gaggaaagga 60
attgattgtg gccctctttg aaaactatct caggccatcc ttgggccact tcaattcata 120
gctcttcctt atgcaaaaata cactcacctc ttgcattt 158

```

```

<210> 38
<211> 585
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (159)..(279)
<223> a, c, g or t

```

```

<400> 38
aaggaattag attccacatc tcaatctaag gagcagcaca aatatgcaga gaggaaagga 60
attgattgtg gccctctttg aaaactatct caggccatcc ttgggccact tcaattcata 120
gctcttcctt atgcaaaaata cactcacctc ttgcatttnn nnnnnnnnnn nnnnnnnnnn 180

```



```

nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 240
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnt ctcagtgtgac tgcagtcaag 300
gtgtcagatg agctatatctc tcactctggag gcttgacagg ggaagagcct acttccaagt 360
tcattagggtt ggtggtagaa ttactctccat tgtggatgta tgactgagga ccttggtctt 420
ttgctagcca tcagaagagg ccagtcttgg gtcctagaga ccacctgtgg ctcccttaca 480
atgtgggctt tctcaacatg gctacttact gcatgaagcc agcaaaaaga atctcccagt 540
ccagtatgct aagacagagc cttgttataa cataagtcca ccctc 585

```

<210> 39

<211> 295

<212> DNA

<213> Homo sapiens

<400> 39

```

gggggggggca gtagtttctg aagagagagc taaactgcat gagcagatgc ttagccaatt 60
tctaaaaatg gaatgggagg tagaaatttc acaggtgggt gctgggttgc agcatttcca 120
catactagga tacatcatca caagatgttg tctgccagct ggtgctataa ctgctagtaa 180
agccacttgc ttctgaatgc atggatgatg tagtgaatcc ctaatgtcag tgcaatgctt 240
tacttatttg ctataaaatc ctttcatagt cagaagcact gttgtgttcc tggca 295

```

<210> 40

<211> 302

<212> DNA

<213> Homo sapiens

<400> 40

```

gcggggggggg gggcagtagt ttctgaagag agagctaaac tgcattgagca gatgcttagc 60
caattttctaa aaatggaatg ggaggtagaa atttcacagg tgggtgctgg tttgcagcat 120
ttccacatac taggatacat catcacaaga tggtgtctgc cagctgggtgc tataactgct 180
agtaaagcca cttgcttctg aatgcatggt gatagtagtg aatcccttaa tgtcagtgc 240
atgctttact tatttgctat aaaatctctt tcatagtcag aagcactgtt gtgttcctgg 300
ca 302

```

<210> 41

<211> 346

<212> DNA

<213> Homo sapiens

<400> 41

```

aagtaattaa cttgatcaaa ctcatctttac agatgaggaa actgattcca ccctccatgc 60
tcttcacctg cattctaaac tcttccaggg ccctccttac caggcagagg caaattgagg 120
aagtggacac agcatttcct ttccttggtg tttgacatgc aaagcacttt agactatatt 180
tagtacctaa ttgatgtggc agcagggggc gcctgggatg ttgtggcatc atttttgctc 240
tcaatgagac acgataggga tgggttggtg gtgggtttcaa aactaaagac cctccagcag 300
agcctgtcaa gtaaaacaag ggtgactgct tgggtgcatc accagg 346

```

<210> 42
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 42
 aagtaattaa cttgatcaaa ctcattttac agatgaggaa actgattcca cctccatgc 60
 tcttcacctg cattctaaac tcttccaggg ccctccttac caggcagagg caaattgagg 120
 aagtggacac agcatttcct ttccttggtg tttgacatgc aaagcacttt agactatatt 180
 tagtacctaa ttgatgtggc agcagggggc gcctgggatg ttgtggcatc atttttgctc 240
 tcaatgagac acgataggga tggtttggtg gtggtttcaa aactaaagac cctccagcag 300
 agcctgtcaa gtaaaacaag gttgactgct tggttgccat accaggcaca ggtagcatg 360
 aaacaaagtg tagtgtccaa ggagagggag cagggtgtct cctttgggtg agctttgcaa 420
 ggggacttgg gacttggtcg gaaaagggtg tttttttagt tgtatgtt 468

<210> 43
 <211> 107
 <212> DNA
 <213> Homo sapiens

<400> 43
 ttcaccgtgc tgtgtgaatt gtggctttta atgtattcct gtcaattcca tatattttta 60
 aaatgttgct tttagagtat gtgcaagttt ggggcatttt tgagggc 107

<210> 44
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 44
 gaacatgatt gagttagaaa ccagtgtggc ctgggactgg gaagctcatt aaaggaattg 60
 ggacttaaac tgggaagggc aagttggctc tagatccata gaaactgaag acaggggaag 120
 agagagatgg tattatagat ggaagaaggg gcagtgggtc atggaataaa tattggtgag 180
 caggggagca aaccaaaggg gtaattggga gattctgagt tttcaaggct attaaaatgc 240
 agttccaggc cctagggagg agagttccag actgttttct ctacactgct ataattcctt 300
 acactgctgg gagcagtttc tttgacatac tttgcaactg cagagggctt tt 352

<210> 45
 <211> 356
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure
 <222> (98)
 <223> a, c, g or t

<400> 45
 gaacatgatt gagttagaaa ccagtgtggc ctgggactgg gaagctcatt aaaggaattg 60
 ggacttaaaa ctgggaaggg caagttggct cctagatncc catagaaact gaagacaggg 120
 gaagagagag atggtattat agatggaaga aggggcagtg ggtcatggaa taaatattgg 180
 tgagcagggg agcaaaccaa aggggtaatt ggggagattct gagttttcaa ggctattaaa 240
 atgcagttcc aggccctagg gaggagagtt ccagactgtt ttctctacac tgctataatt 300
 ccttacactg ctgggagcag tttctttgac atactttgca actgcagagg gctttt 356

<210> 46
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 46
 ttgttgaaat tttgtttgac tgcttttagta caggagtata ttccccaaga caagagacct 60
 gagagctttt ccctgggttaa gataccaagg atgatttcca aatttttagac atccttcccc 120
 ttgttccacc aatttttttt ttcttctggg aaaatagcca ggatgattgc aaaacataag 180
 cttgtaaaaa ggcaaaactc catggatgta agaaagtaaa tttcttgagg gccacaccca 240
 tgataacgct ggaattttca tttaattcct aactcatttt ttgttgtttt tgttttttta 300
 aactcaaattg tgtctcttta attgaggtca cttacttggg tgggagatta atattctggg 360
 ggggaaaactt tcttttttaga gtttatattg ttttattcct tcagtcactc agtattacta 420
 atggggtagc ttttggaatt ttccatcccc ccacttttca gattactttt ggtctttttt 480
 tt 482

<210> 47
 <211> 462
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (380)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (423)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (451)

<223> a, c, g or t

<400> 47

```

gggaggccct gcttctcgcg agctgtcccg gcaggacaga gactcttccc gccgcggccc 60
tgccattcca ggctgaggct gtgagcagca ccatgacaag ctccagccgc agtggctctc 120
aacagtgtgg gtctctgacc acccgacgag ctggaagtgc agaccgctga cctcccttga 180
gaacctactg ggttcttgca gtaggctcct cagcgggtgc taaacacgcc actcagatga 240
ttctatgcac catcacattg gaaacttttt tcattgactg ttacttaatg agaagacttc 300
cctccgggat ggttctgaag ctctcttcat aggagcaagc ctttggcggg agagcactga 360
gcagacgtgc agcatctttn ctggcttcta ccgaaacacc atggatccag acgtgggttt 420
gtngtctgca cgtggaagcc agccctgcgt ngggtgagcc tg 462

```

<210> 48

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 48

```

atgaggctgc ggtcatcagg gctggaggag ttagaggagg gcaggaagga ccttgccatt 60
ctcttatcaa ggaactgcc a ggacctctgt gaagctgagg ccttcagcga gctcctccca 120
ggaccgtcgg agagtcccag gaatctggct gtgctgattg gtacagtctt cttcagattt 180
attctatata aagtaagcat attgtcaacc ttctctgctc ctttcaagca cctgagtctt 240
ggcatcacia acacggagga tgacgacacc ctacgtacca gcagcgcgga ggtgaaggag 300
aaccgcaacg tgggcaacct ggccgcgcgg ccaccgccct ccggggaccg ggcccggggc 360
ggcgcgcccc gcggaagag gaagcggccg ctggaggagg ggaatggggg ccacttgtgc 420
aaactgcagc tgggtctgga gaagctgtcg tggctcggtg cgccaagaa cgcgctggtg 480
cagctgcacg agctgaggcc gggcctgcag taccggacag tgtcgcagac gggcccgggtg 540
catgccccgg tcttcgcggt agcggtgagg gtgaacgggc tcacgttcga gggcacaggc 600
cccaccaaga agaaggccaa gatgcgcgcg gcggagctgg cactcaggtc cttcgtgcag 660
ttccccaacg cctgccaggc gcacctggcc atgggcgggg gcccgggccc cggcacggac 720
ttcacctccg accaggccga tttccccgac acgctcttcc aggagttcga gccccggcg 780
ccgcgccccg gactcgcggg aggcgcgccc ggggacgccc cgcttctgtc cgcggcctac 840
gggcgacggc ggctgctgtg ccgcgcgctg gacctggtgg gcccgacccc cgccaccccc 900
gcggcccccg gcgagcgcaa ccccggtgtg ctgctgaacc gcctgcgcgc cgggctgcgc 960
tacgtgtgtc tggcagaacc ggccgagcgg cgcgcgcgga gcttcgtgat ggccgtgagc 1020
gtggacggca ggacgttcga gggctcgggg cgcagcaaga agctggcccg gggtcaggcc 1080
gcgcaggccg cactgcagga gctgttcgac atccagatgc ccggccacgc gcccggcagg 1140
gccaggagga cgccaatgcc gcagggctgg ctccacgtg caggaccaca aaaccacgtc 1200
tggtatccatg gtgtttcggt agaagccagc aaagatgctg cacgtctgct cagtgtcttc 1260
ccgcaaagg cttgtctcta tgaaggaagc ttcagaacca tcccggaggg aagtcttctc 1320
attaagtaac agtcaatgaa aaaagtgttc aatgtgatgg tgcatagaat catctgagtg 1380
gcgtgtttag acaccgctga ggagcctact gcaagaaccc agtaggttct caagggagggt 1440
cagcggctctg cacttccagc tcgtcgggtg gtcagagacc cacactgttg agagccactg 1500
cggctggagc ttgtcatggt gctgctcaca gcctcagcct ggaatggcag ggccgcggcg 1560
ggaagagtct ctgtcctgcc gggacagctc gcaggaagca gggcctccc 1609

```

<210> 49
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 49
 gctcccacca cggttaaaat tgagctaagt gagtatcaaa cacacttggt cacttttttaa 60
 agagaaagca cattacctga aaatggcatc tttcctcttg tcaactcctg ccaaaagaaa 120
 gcctcacccc ctaccccctg cacaccccag aattcatact ttcaggcagc cctctggaaa 180
 ctaaggacat ctaaatctaa aggtcaggat tctgtgagag aaaaccagtc caacatgctc 240
 atgaaatcct aactgtgcac aggggttgat gg 272

<210> 50
 <211> 405
 <212> DNA
 <213> Homo sapiens

<400> 50
 ctgatcccca cctttgtcct agatgccaaa tatgcagctc tcatgggaca gccctggggt 60
 ctgtgtgcaa tctgtgtcca catctgtctc ctgctagact ctgtctcact taggagtttt 120
 agtactgcac agcacctgga acgagcttcc aaatccactt cttccctcca ccatctcata 180
 ttaattaatc ctgccagaga gggctgcaca ggccgaactg cctgagaata gcaaagagggt 240
 tgtttcaggc ttgggaacta cagagacacc tgtaatgggg aagggatgct cttgccaaagt 300
 gagccgtggg cactgctggg agccacacag gactttgcat taggtcatgc aaaccccaca 360
 cagaagcagg agttggcaag ggccaggcct gcaggggccc agggga 405

<210> 51
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 51
 gggatgcata gtgagtccaa aatcacctcc ttctcatgaa tccgggagtc cctggagctc 60
 acggagggct tcttgggtgc ttgaaggggt ggaatccagt ctggggcgcc ccatcttcct 120
 gccgcctgcg gttgctgcag ccttctgtct tcaactgtgaa ccctgggata ctgcggcggt 180
 gctggctgga aggctggctt cccagagcag tgaccgcgtg tggcctgctt cctgagagct 240
 ctgcgtgtga cagcatttcc ttctgtctct ataaaaacac aaaaattagc cagg 294

<210> 52
 <211> 3381
 <212> DNA
 <213> Homo sapiens

<400> 52
 atggagaagt ttctgcagat cgcgccctcac tccttgcca tcgtcctggg cccggcagag 60

```

gcgcccggcgg gggaaaggcc aggggagcc cgccccgcgc ccccggccca gcccggccag 120
ctcggccggc accacatcgg ctacgagatc ttcggcgact tcaaagccga gaacatgcag 180
cacttctgga acaagaaggt cacggccgcg gtggccgaga ccttcttctt gggctggatc 240
gacgagcagg tcctgctgat ccagggcaag gaggaacatc tggaggcgct gcgcgaaggc 300
tggaagcgcc gggccctgcg gccgccctcg ggcttccaca tccgctgcct gggatgatga 360
tcacccatca gtatgtctcc catcagtcag tctcagttta ttccactcgg ggagatcctc 420
tgcttggcca tctcagcaat gaactcggca agaaagcctg tcacccaaga agcactgatg 480
gagcacctga ccacgtgctt ccagggtgtt ccaacgccaa gccaaagaaat tctgcgccac 540
acgctgaaca cgctggtacg ggagaggaag atctacccaa ctccagatgg ctacttcac 600
gtgacccac agacttatct cataactcct tccctcataa gaactaacag taaatggtag 660
catttgagc agaggatacc tgaccggtct cagtgcacct ctccgcaacc cgggaccatc 720
acgcccctcg cctcaggctg tgtcagggaagg agacattgc cccgaaacca ctgcgactct 780
tgccactgct gcagagaaga cgtgcacagc acgcatgcac ccacctgca aaggaagtct 840
gccaaggact gcaaagacc ttactgtccc ccttctctgt gccaggtgcc accactgaa 900
aagagcaaaa gtactgtaaa ttttctctat aagacagaaa ctctctcaaa acctaaagat 960
agtgaagagc agtcaaaaaa attcgggcta agttatttcc ggttaagttt taaaaagac 1020
aagacaaac agctggccaa ttttcttgcc cagtttctct ctgaagagtg gcccctgcga 1080
gacgaggaca cgccagctac gatccctcgg gaagtagaga tggaaatcat taggcgcat 1140
aaccagacc tgaccgtgga aaatgtcatg cggcacaccg cgctcatgaa gaaactggaa 1200
gaagaaaagg cccagaggag taaagccggg tctctgccc atcacagcg aaggagtaaa 1260
aagagtagga ctcatcgga gtcccatgga aagtctcgg ctccagcaa gacacgggtg 1320
tctaaaggag acccttccga cggttcacat ctggatatcc cagctgaaag agagtatgac 1380
ttttgtgatc ctcttaccag gagatccaac aaagccaagg agagatccag gtcgatggat 1440
aactccaaag gccctctggg tgcttcttct ctagggacgc cggaagacct tgctgaaggc 1500
tgcagccaa acgaccagac ccccagccaa tctacattg acgacagtac tttaaggcct 1560
gcacagaccg ttagtctcca aagggtcac atttcttcca caagctataa agagggtgtg 1620
attccagaga tagtcagtgg cagcaaggaa ccgtccagcg cttgcagcct tttggagcca 1680
ggaaaaccac ccgagagttt gccatcctat gggaactca actcttgctc aaaaaaaca 1740
gccacagatg actatttcca gtgcaacacc tctactatca caagtcgagc ctgtccctcc 1800
tcaaattctc cccgaagaca cctgctgaca cattgccagg ccgatgtgag aaactggaac 1860
cgctccctcg ggacctcggc ggcacaagcc atgcctgctt cccagcgtca gcaggagtca 1920
ggaggggaacc aggaagcctc ttttgactat tacaacgtct ctgatgatga cgactctgag 1980
gaaggggcaa acaagaacac agaggaggag aaaaatagag aggacgtagg caccatgcag 2040
tggtcctcgc agcgggagaa ggaaagagac ttgcagagga aatttgaaaa gaacctcacc 2100
cttcttgctc caaaagaaac cgacagcagc agcaaccaga gagccacca ttacgcccgg 2160
ctgacagca tggacagcag cagcatcaca gtggacagtg gattcaactc cccacgatgc 2220
cctgcagctc tgaaggctga agcatcctac tcagaacacc aggagaaaca ggatcttaag 2280
atgccagaac aggagtggc ttgtttctta ggtcggaaga tctgaacta cgatgacatg 2340
agcaacctaa acatccccag tgagattggg gggctccctg gtgtgaggct ctgcaggct 2400
gagaggctga aagctccccg gttctccctc ttctgggta tctatgaaca ttacagtga 2460
acaaacttca ccatggcggc aaacagcagc aatggccaga caaagacagg ggccccactg 2520
cagcagggtg aggaccccc caagatgatt ccagtgcagt tgattcgagg accaagtttg 2580
agaaaacaaa ctgagctgcc agccttgccc ctcaccgtcc tcatcagcga acctgttccc 2640
ctgagaatgg cttgctcatc tatctcaggg gataccagg cagcctctgg ctccagcgac 2700
tccctgtccc cgtcactggc cttcgaggca cagttcgtct tccctgtgaa agctgccact 2760
ctgacctccc tgctgagtat gagtgatggg gtagaatcgg cgaatccttt agatctttac 2820
tgcattgttg ctgaagttat gctgattgtg actatttctg ggctgtcaat ggatttttat 2880
gtggccctga gcacagtgtc tcaggagggg tcaagggtag agaattccggg tttatttatc 2940

```

```

catgcagagc agtactgtag ttacaagggtc aaaaggaaac caccaaaca gtttaattctt 3000
catagaaaaa atagtccaaa tcctggaggg aaagtggggg tcgggggaag aagggaggca 3060
cctgacacag cgctggcaga ggctgagaca gaaggaaatg ctgtcacacg cagagctctc 3120
aggaagcagg ccacagcggg tcaactgctct gggaagccag ccttccagcc agcaccgccg 3180
cagtatccca ggggttcacag tgaagacaga aggctgcagc aaccgcaggc ggcaggaaga 3240
tggggcgccc cagactggat tccaccctt caagacacca ggaagccctc cgtgagctcc 3300
agggaactccc ggattcatga gaaggaggtg attttggact cactatgcat cccagcttc 3360
catgccagag agctagacta a                                     3381

```

<210> 53

<211> 245

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (199)

<223> a, c, g or t

<400> 53

```

gaaaacctta agatacacag gtataagatg ttattattta ctcattccatt ctgcaaatat 60
atacccctat tacctagact ctgttgagga tagaggccgt gctttttccc acgtgtggag 120
tagagcaaca tagaagagtg ccttgcagtg ggtgctgtaa tggagatgtg taccaggtac 180
aacaggaacc taagggggna aaggaacccc tgagtttattc ggggggcacc aggggaaggct 240
tcaca                                     245

```

<210> 54

<211> 388

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (282)

<223> a, c, g or t

<400> 54

```

tctctatcct gacttcatga tccaccgcc ttggctcca aagtgtctggg attcaggtgt 60
gagccatcat gcctgggtat tttgaaaacc ttaagataca caggtataag atgttattat 120
ttactcatcc attctgcaaa tatatacccc tattacctag actctgttga ggatagaggc 180
cgtgtctttt cccacgtgtg gagtagagca acatagaaga gtgccctgca gtgggtgctg 240
taatggagat gtgtaccagg tacaacagga acctaagggg gnaaaggaac ccctgagttt 300
atcggggggc accaggggaag gcttcacaga ggacatgatg tgagttgcca tttgaagaat 360
gagaaattgt tcttctgatg aactaaac                                     388

```

<210> 55
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 55
 ccaaacagaa tcttttcagaa tcctgttggt ctggcaggta ttttttaata tttccttctt 60
 acaaatttcc tttttacaga tgatatgcat tatagtgcaca ttaacaatca atcttagaca 120
 caagtgattg tttttataaa taggatctcc tcaatattag tgatcctata ttaagaaaga 180
 tagtacatgt gaaccaatgg taacccaaaa gaatttgaaa agcaataatt tagtgggagc 240
 tcacttggaa tataactcta tgtcatcatg tattttattta agtcatattc tatgaaatat 300
 cctatttgaa agcaaggaca ccctttgggt gcaaccccaa gttacttatg cagtattcgt 360

<210> 56
 <211> 1203
 <212> DNA
 <213> Homo sapiens

<400> 56
 atcttgctct ggctaatttt cgtattttta gtagagacag ggtttcacca tgttggccag 60
 tctgatctca aactcctgat ctcaagtgat ctgcctgcct tggcctccca aagtgttggg 120
 attacaggcg ccacgccagc caacacctct tttttacgaa gtactgcatg agtaacttgg 180
 gggtgcaacc aaaggggtgc cttgctttca aataggatat ttcatagaat atgacttaaa 240
 taaatacatg atgacataga gttatattcc aagtgcgtc ccactaaatt attgcttttc 300
 aaattctttt tggttaccat tggttcacat gtactatctt tcttaatata ggatcactaa 360
 tattgaggag atcctattta taaaaacaat cacttgtgtc taagattgat tgtaaatgtt 420
 aatataatgc atatcatctg taaaaaggaa atttgtaaga aggaaatatt aaaaaatacc 480
 tgccagaaca acaggattct gaaagattct gtttggaaaa aacaaacaaa cgaacaaaaa 540
 aacgttttat ggggctagggt tttatacctc tttcccagtt attttctttt gctttcttca 600
 ccacgttggtg gcaggccagg tttcactaac tcaggcttcc ataacaacgg tttcagcact 660
 gaccgagtgg ttccatcaaa tattaacagc tgagagagtc agtgccttcc tgcaaaggct 720
 ggaatgtcac aaaagcccat caagagcttt gcctcggcct ttcctgggccc ttaaatacatg 780
 acaggataat gaaggaattc ttaacgggac ccgttttagga gtaaataagt tttattgggg 840
 ggtccaaaga aactccccag gcctccacaa acaagcctta ttgggtacta aagaaactcc 900
 ccaaacctcc atgatttagc aggagacaag acaaaggat tgaccccgag acctggaccc 960
 atttagggtta agtaaattta ctgagggtcc agaggaagag cttcagggct cagatcttat 1020
 ttatagattt aaaaaagtga atcacttatg tcttttagatg aatgtacact cacatgtaga 1080
 catatagctt ataatagtaaa taagctctgg aaaactttgt agttttgagt tggctctggg 1140
 atcattttcca ggctttctcc ccatacctgg ttacagaaat aaactccctc ctttatcagt 1200
 taa 1203

<210> 57
 <211> 780
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (192) .. (219)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (442)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (452)
 <223> a, c, g or t

<400> 57
 gctcgacaat tttatgacta tattttaatta atatgagcac atttttagagt ggagaaaaca 60
 aagacttcat tcatccagca aatattttatt cagtacccga agtgctagaa actatatgag 120
 ggtagtaaat aaaatagaat attcctgtcc tactatggag ggggaatgga gagggagtgg 180
 aggaatagat gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnng ttcattgtac ataaagaagt 240
 tattttttttc tgacagtaac taacaaagggt ctgggcaaga atcagaggggt gaccattttta 300
 agaggtggtg tttctgttga gactcaaagt ataagaagga tccagtgatg cagaaatcca 360
 gggcaaggaa taggatgttt gaagcctcca tagaagaaaa gcattttata gtagatcaga 420
 aagcaataac aaaaaagaaa anagaaaaaa anccatttgg caatgtctag gaacaaaaag 480
 gacattaacg tgggtagaat gctgtgagct aaaaagagag tagattgaaa tgaagttaaa 540
 gagaaatgga gagacagacc tcatagaatt ttgccctaaa tgaaatggga agccagggaa 600
 gtatgacaca gtcccataat aaacctgctt ctggtgcaga atggattgga attatcaagg 660
 cagttagtga ggaatccagt tagaagggtga atacagtgggt tcagtgggtcc aggatggaaa 720
 tcacagtgcac ctcaactaag aaggcagcag tagagggtaga gagaagttga tagatttgctc 780

<210> 58
 <211> 945
 <212> DNA
 <213> Homo sapiens

<400> 58
 gctcgacaat tttatgacta tattttaatta atatgagcac atttttagagt ggagaaaaca 60
 aagacttcat tcatccagca aatattttatt cagtacccga agtgctagaa actatatgag 120
 ggtagtaaat aaaatagaat attcctgtcc tactatggag ggggaatgga gagggagtgg 180
 aggaatagat gataaacaaa caaacaaaaca agcaaactag ttcattgtac ataaagaagt 240
 tattttttttc tgacagtaac taacaaagggt ctgggcaaga atcagaggggt gaccattttta 300
 agaggtggtg tttctgttga gactcaaagt ataagaagga tccagtgatg cagaaatcca 360
 gggcaaggaa taggatgttt gaagcctcca tagaagaaaa gcattttata gtagatcaga 420
 aagcaataac aaaaaagaaa aaagaaaaaa aaacatttgg gcaatgtcta ggaacaaaaa 480
 ggacattaac gtgggtagaa tgctgtgagc taaaaagaga gtagattgaa atgaagttaa 540
 agagaaatgg agagacagac ctcatagaat tttgccctaa atgaaatggg aagccagggga 600
 agtatgacac agtcccataa taaacctgct tctggtgcag aatggattgg aattatcaag 660

gcagttagtg aggaatccag ttagaagggtg aatacagtgg ttcagtgggc caggatggaa 720
 atcacagtga cctcaactaa gaaggcagca gtagaggtag agagaagttg atagatttgt 780
 cagttaagtc ctgaatcacc ttgattgtta cctactctct ctctttgggtt cttaattttg 840
 tcttctgtaa actgggatca attatattaa tgccaagaga tgttcagaac atgatttgag 900
 acaagacatg agtacctgac ataaggtagg atgcagtaat ctgag 945

<210> 59

<211> 444

<212> DNA

<213> Homo sapiens

<400> 59

cagaatagtg aagtcctaata gcctacagga tccattttgcg acaaagaaag aattcattca 60
 gataaaaaagc taaccgatag gcaaagattt tcaaattatt ttcttcttaa atattttttca 120
 catttgtagt gaccaaagga gacctggatt tcaatcttga ctttggacct cactagctct 180
 gcagtcttga gcaaattatt taatgtcctc cgaatccgtt tcctcatctg taagaagggga 240
 tagtgtttta acttcacatg gttgagataa taatagtaaa caccttagtc ttgtgtttgc 300
 cacagtggta gcacatagat attcaaagtt attattccta caaaaatacg gactgtactc 360
 accccataat tgcattttta aagaaagacc agttttgcaa ttttccagga ttatctacat 420
 gatagctttt tacacaatca gtat 444

<210> 60

<211> 240

<212> DNA

<213> Homo sapiens

<400> 60

cagactgtac gtcacacact cactttttgtt ttattacagg acaagtttac atagggtttg 60
 aataccggga ggcagggatc attagggact atcttagagt ctatttatag taccctctaa 120
 gttgtaatta aatttttttt tgtgatgaga tgtacacaac aatttagtat tttagccgtt 180
 ttttaagtga cgattcaatg acatagtcac aatgtaggc aactatcacc attgttttca 240

<210> 61

<211> 598

<212> DNA

<213> Homo sapiens

<400> 61

gcctgggttaa gagtgagcgg agtgagacct gtctctaaaa ataaaaaacc ccaagctact 60
 tatacattat atcatggtgt tatcaataag ggcaattaaa aaaaaaatcc aggaacattt 120
 agcttgctgt tgcggctcag gagctcttgt aagggtgcac ttaggatgtt acccagggtt 180
 gaagtctgaa agctgcattg aactgaagga tttgcctccg agctcactta catgggttgc 240
 gacaaggtgc tcaattgctc actatgtgga cctgtccatg gagctgttca tgacatgact 300
 agtttaccce aaatgagtga tccagaagaa aacgtcatgc cacaattttt ttatgaccca 360
 gactgtacgt cacacactca cttttgtttt attacaggac aagtttacat aggggttgaa 420

taccgggagg cagggatcat tagggactat cttagagtct atttatagta ccctctaagt 480
 tgtaattaaa tttttttttg tgatgagatg tacacaacaa tttagtattt tagccgtttt 540
 taagtgtacg attcaatgac atagtcacaa tgttaggcaa ctatcaccat tgttttca 598

<210> 62
 <211> 1430
 <212> DNA
 <213> Homo sapiens

<400> 62
 aggggtacaac ccatagccat ccatgttcat ctttgttttg aatataattg gctagaagat 60
 gtacatatat ctatgtaact tcctctagca tcctccagta tggaggctgc attaagactg 120
 catgaaggag agggagagaa gggagaaaca gagcagctgg acaagaggac aggtataggg 180
 aataagggag aagccagtaa ggcaggaaag accctccgtg acaaaggggc agggaacaga 240
 actcaaacat ttaatggcag gtaaccagg ttagaatggg aaattgaaag gtgaatataa 300
 agggagaatg gtgaaatgaa ttttctgaaa ttaattgctg tgtttatagt ttttagccat 360
 gcatcggaat cacctcagga ctccactccc aatcaattat atatctgggg gaggaccaag 420
 gcgttggtat ttttcagaag ctccactggg gattctgaca gcacagctag gattaagaaa 480
 ctgatcaatg ggaacagcat gcctgttgca gaggagcttc cctgggaaat gtcacacaca 540
 gaacatcaat cttctttccc cactcctgag atccctcatt ctttggcacc aggaacagtt 600
 gcaattagta aaccctgggt ccctgctgtc tcacaaatcg caagagtcca acgtgtggat 660
 ataaactttt gttcatggga ggatctttct cccagtggaa aagcaactgg gaaaagcagg 720
 acacactgca cagtgactgc agtttcatcc aatgccacca cccatgcagg cataaataat 780
 gaacatggat gggggagctc ggagctgctg aattgtaagg ctcataaatg tttaaacttt 840
 ttccattaat aatatctctg ctttctgtgt atgtgtatgt agaagttctg tctttataat 900
 tctcaccact ttgcatcata ctttccagga ggaagaaaga acacagaaat taaaattctc 960
 acaaaggtta ccattaagct agaggaagac cacaccactg tgtgtccaca aagatacaga 1020
 gccaggccgg gttcagccat gctggtcac tgctctatat aatacaatta tttagagatg 1080
 gtgggtagag aacaactaca gaaaaaaaaa aactgccaga aactagaatg tcattttttac 1140
 acactcattt gtagaattcc tcccagtttt tactgaaggg aagtttaaaa tgattttcat 1200
 ttggggaaag aactgttttg agtttaccct ataagatggc cactaaaact caccactttt 1260
 catgattacc tagccatcct cagatcatct tcatgatttt cctggaaata acggaagagg 1320
 ccctggggat gattttattg gtagagtggg aatgtattaa aattctctac ttccttgtaa 1380
 catggtcttt cctccaccct acaaggtgtg tgcttgtaac tcaaatttcc 1430

<210> 63
 <211> 3120
 <212> DNA
 <213> Homo sapiens

<400> 63
 aggggtacaac ccatagccat ccatgttcat ctttgttttg aatataattg gctagaagat 60
 atacatatat ctatgtaact tcctctagca tcctccagta tggaggctgc attaagactg 120
 catgaaggag agggagagaa gggagaaaca gagcagctgg acaagaggac aggtataggg 180
 aataagggag aagccagtaa ggcaggaaag accctccgtg acaaaggggc agggaacaga 240
 actcaaacat ttaatggcag gtaaccagg ttagaatggg aaattgaaag gtgaatataa 300

aggaggaatg	gtgaaatgaa	ttttctgaaa	ttaattgtctg	tgtttatagt	ttttagccat	360
gcacgcgaat	cacctcagga	ctccactccc	aatcaattat	atatctgggg	gaggaccaag	420
gcgttggtat	ttttcagaag	ctccactggt	gattctgaca	gcacagctag	gattaagaaa	480
ctgatcaatg	ggaacagcat	gcctgttgca	gaggagcttc	cctgggaaat	gtcacacaca	540
gaacatcaat	cttccttccc	cactcctgag	atccctcatt	ctttggcacc	aggaacagtt	600
gcaattagta	aaccctgggt	ccctgctgtc	tcacaaatcg	caagagtcca	acgtgtggat	660
ataaactttt	gttcattgga	ggatctttct	cccagtggaa	aagcaactgg	gaaaagcagg	720
acacactgca	cagtgactgc	agtttcatcc	aatgccacca	cccatgcagg	cataaataat	780
gaacatggat	gggggagtc	ggagctgctg	aattgtaagg	ctcataaatg	tttaaacttt	840
ttccattaat	aatattttctg	ctttctgtgt	atgtgtatgt	agaagtctctg	tctttataat	900
tctcaccact	ttgcatcata	ctttccagga	ggaagaaaga	acacagaaat	taaaattctc	960
acaaagggtta	ccattaagct	agaggaagac	cacaccactg	tgtgtccaca	aagatacaga	1020
gccaggccgg	gttcagccat	gctggtcac	tgctctatat	aatacaatta	tttagagatg	1080
gtgggtagag	aacaactaca	gaaaaaaaaa	aactgccaga	aactagaatg	tcattttttac	1140
acactcattt	gtagaattcc	tcccagtttt	tactgaaggg	aagtttaaaa	tgatttttcat	1200
ttgggggaaag	aactgttttg	agttttaccct	ataagatggc	cactaaaact	caccctcttt	1260
catgattacc	tagccatcct	cagatcatct	tcattgatttt	cctggaaata	acggaagagg	1320
ccctgggggat	gattttattg	gtagagtggg	aatgtattaa	aattctctac	ttccttggtta	1380
catggctctt	cctccaccct	acaagggtgtg	tgcttgtaac	tcaaatttcc	atttgagtaa	1440
ttagcaatta	ttattttaaaa	ctaacctgaa	aataaaaaatt	gtattcaatt	cattcatagg	1500
gagcatctac	ctattttatta	ttaccacata	ggtgatgtga	ctctagaaac	atcttggtat	1560
tcaaatagcc	aattaaaaata	taaaatgtaa	tgatttttcta	aagctactcg	ttttccttct	1620
ctcatctcta	tctactaatt	ggataagtct	attctccaaa	cacagcaaag	atgattgaca	1680
gaattctaaa	aatacacaaa	tttccttatt	aaagagggtg	aatggatgtt	agcactgtat	1740
cagacacata	atattaagga	gatacctgct	gtttaacatt	aacattctgt	gtagtttttg	1800
ttttgcatct	ataacagaca	tcaaaaagtg	aataaaaaaca	tgctgtgaaa	ttacctaaat	1860
aataaaattaa	cttcctggat	acaaggaagt	tatttttagca	agttcttttt	aataaaaagca	1920
aagaatgggg	atgtaacaat	tagagaaatg	tggaggaaaa	cataagaaag	ttgggagagg	1980
gaggtcaaat	ctcacttcca	gttatcagta	aagtgcacat	tcttttctgt	attctgtgag	2040
gctggagggtg	ctgctgatag	aatgtcctca	catattctgt	caatgccagg	atgcaaacat	2100
cactaaataa	accctcgtgt	caaaatgtca	catagtgatt	atttatgctt	cttgacaaca	2160
tcaatgaatg	acaaggctgc	ctctacagct	gtgaaagggt	gcataccaat	tgttagaggt	2220
aacatagatg	aaggacaaa	tagttatcag	aattcattta	aactgtgcta	ttaaattgga	2280
tatatttgca	gtagccatca	cagtaaatac	tactgtgatt	ctcctgaaag	aatattgcct	2340
aaaaaattta	acgcagaaca	tttcctaatt	accatgcatt	tctgaatctc	tgctaccatg	2400
tagatattca	tactgaaaga	gaagtgtcat	ttctttttct	tctttaattt	gtcattgttt	2460
cccagtgttc	ttgcttctgg	aattgaattt	gaagtccatt	ttttaagggg	actgcaatta	2520
ttaacgaagt	ctggcatgat	aatgtctcag	cagaatgtac	acaacgtgac	taagatagtt	2580
aacgccttag	ttgttccaat	tccatattgc	ttcctgttcc	gaatctacta	atgagtaata	2640
agagatgtag	cactaatcaa	tgggacaaaa	gcacgcatta	tgaaaatact	ctatcaactc	2700
catcagtaaa	atttgtaagg	taattataaa	tttgttatca	gacattttta	attgttacag	2760
tataattaaa	aggtattatt	ttattgggga	taaccttcca	ctctgttaat	catactaaaa	2820
cacttgatgc	tcaaacacat	tcaaagttac	cttaatcagc	gtgaatttca	agatcctctt	2880
aaaaatgacc	tctgatacta	ccctgagatt	actggaggtg	aaatccttgc	tttgcacttt	2940
ctggctgtgt	gaacttaggc	aattactaaa	tttgctgttc	ttgtattttc	tcactgttaa	3000
aatgaaatag	aaatagcacc	taccctgtg	aggtagttt	ataaaaaggat	taaatgagaa	3060
aatctacata	aagcatagtg	cctaagatct	gtcacacaat	attttcaaga	tccatgaaac	3120

<210> 64
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 64
 ctccccagat atataattga ttgggagtg ccaaggcgtg gtatTTTTtca gaagctccac 60
 tgggtgattct gacagcacag ctaggattaa gaaactgatc aatgggaaca gcatgcctgt 120
 tgcagaggag cttccctggg aaatgtcaca cacagaacat caatcttcct tccccactcc 180
 tgagatccct cattctttgg caccaggaac agttgcaatt agtaaaccct gggtccctgc 240
 tgtctcacia atcgcaagag tccaacgtgt ggatataaac ttttgttcat gggaggatct 300
 ttctcccagt ggaaaagcaa ctgggaaaag caggacacac tgcacagtga ctgcagtttc 360
 atccaatgcc accacccatg caggcataaa taatgaacat ggatggggga gtctggagct 420
 gctgaattga ggaagaaaga acacagaaat taaaattctc acaaagggtta ccattaagct 480
 agaggaagac cacaccactg tgtgtccaca aagatacaga gccaggccgg gttcagccat 540
 gctggtcatc tgctctatat a 561

<210> 65
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 65
 atgaatTTTt tgaaattaat tgctgtgttt atagtTTTTa gccatgcac ggaatcacct 60
 caggactcca ctccaatca attatatatc tgggggagga ccaaggcgtt ggtatTTTTt 120
 agaagctcca ctggtgatct tgacagcaca gctaggatta agaaactgat caatgggaac 180
 ggcatgcctg ttgcagagga gcttccctgg gaaatgtcac acacagaaca tcaatcttcc 240
 tccccactc ctgagatccc tcattctttg gcaccaggaa cagttgcaat tagtaaacc 300
 tggttccctg ctgtctcaca aatcgcaaga gtccaacgtg tggatataaa cttttgttca 360
 tgggaggatc tttctcccag tggaaaagca actgggaaaa gcaggacaca ctgcacagtg 420
 actgcagttt catccaatgc caccacccat gcaggcataa ataatgaaca tggatggggg 480
 agtctggagc tgctgaattg aggaagaaag aacacagaaa ttaaaattct cacaaagggt 540
 accattaagc tagaggaaga ccacaccact gtgtgtccac aaagatacag agccaggccg 600
 ggttcagcca tgctggtcat ctgctctata ta 632

<210> 66
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 66
 gcagcattaa atgaatgcct gttcattcaa gcatttcatt ttgttttaaa actttaaac 60
 atttcatttc tatgacataa catcagtttt tctcatgcca agcctaaata tatatatatt 120
 cttggggatc tgtgactttt ctctataaga tacctctgtg tctttattcc aatgataatt 180
 ttagaaatta gcatacacct atttctgcat gatcttcata actatactgt aactttctat 240

tagcataaaa	tttcagtgcc	acctttgtag	cagttttttac	aacagccttg	gtactgcata	300
attcattttta	tgtattgaca	agagatctga	ttatagttat	gttggcttgt	ccaaagtgtca	360
caattagcca	ggtgtggtgt	ctcacacttg	tgatccca			398

```
<210> 67
<211> 2487
<212> DNA
<213> Homo sapiens
```

<400>	67					
gatgatagga	gttaagagag	gactatagaa	aactgggtct	ctaagctgat	gtgtcaagtc	60
acactgtcct	ctgcttatcc	taagcttacc	ttgctcaaat	ttcttttttt	tttctttttc	120
tttgtttttg	gtttttatnt	tttcttaaat	ttcaaggata	ttccttcttt	tgtaaagtgc	180
acagagtatc	atggctctgt	cgccgaggct	ggagtgcaat	ggtgcagctc	caggctactg	240
caaccctgc	cttcagggt	caagcgattc	tcctccctca	gcctcccaag	tagctgggat	300
tacaggcaca	tgccatcatg	cccggctaata	ttttgtatnt	ttggtagaga	tggggtttca	360
ccatgttggc	caggctggtc	tggaaactct	gacctcaggt	gatttgccca	cctcagcctc	420
ccaaagtgtc	gggattacag	gtgtgagcca	ccgtgcccg	cccaaccagg	cttcttaaat	480
gaattctaag	atagaaacaa	caggagctgc	caggactctc	ttaagggtctg	aacctaggac	540
tgtcacagt	acatttctgc	catattctgc	tggtcacaag	gcaagcccaa	attcaaaagg	600
agagaaatag	acctcttaga	gtttcctaata	aaaaggtaata	ttcattaaaa	atacaattca	660
taaatttagcc	ctatgtttac	tactgtcttt	tcagctcttt	ttttattcca	tgcathtaatt	720
gattcgtcac	cacttggtatt	gtgccaccaa	tgtttctatg	acatgatcta	aaaaaaaaaa	780
aaaaaaaaaa	aagggtctcag	tagttttcac	ttaaaagaca	aagaggccca	ctgagctatt	840
acagatgtta	gttaggattc	atttacttta	atatggtaga	aagaatgcta	tgataccact	900
ttagtgatga	acaaaataag	cttaatacaca	tcctaggagc	taagtattct	gacattataa	960
tctcttctct	cagagtccca	tcacagcagt	cttaggattc	aagatctatt	cttgggaaac	1020
attatagaac	cagtgtgtca	tgtacataca	aatgagggaa	aatataatgg	ctttggtaata	1080
cctgtagtta	tctttcttgt	catatactct	ttttttcatt	tttaaaaaatt	ggggcaaaat	1140
ttatataaca	taaagttaac	cattctgaag	tgtacaatnt	aatggcattnt	aatacattca	1200
cagtgttgta	cgactttttt	ttttttgagg	aaaagcatat	ttttaggata	atgtcaaaac	1260
agattaataa	gatgctaata	agatggccag	acattcactc	agaagtgttt	tttgttttgt	1320
tttggtgaaa	tggtatgaga	gatatgttgc	cctacactta	ggccactgca	ttcccgttta	1380
agtgccagga	ttgtgtcagc	aacaggatgg	cctaaacaat	ctcagtcttg	tctcctgcc	1440
gccccctaaa	tcttcagaa	ttgcaagaat	aggccagggtg	tgggtggctca	cacctgtaata	1500
cccaacactt	tgggaaggcca	aggcaggcgg	atcacttgag	gccaggagtt	tgagaccagc	1560
ctggccaaca	tggcaaacc	ccatctctac	taaaaataca	aaaattagcc	aggcagggtgt	1620
ggtggtgcat	gccggtaatc	tcagtttctt	gggagggtctg	ggtgggatga	tcgcttgaac	1680
ctgggaggcg	gaggctgcag	tgagccgaga	tcacgccact	gcactccagc	ctgggcgaca	1740
gaatgaggct	ttgttctcaa	aaaagtgtct	aacacctgta	accccaacac	tttgggagcc	1800
acaggcattt	ggattacttg	agctcaggag	tttgagacca	gcctgggcaa	catgggtgaaa	1860
tcccacctcc	aaccgaaaat	gcaaaaacta	gccgggcata	gtgttatgtg	cctgtgggtcc	1920
cagttacttg	ggaagctgag	atgggaggat	cactagagcc	cagggaagtca	aggttgagct	1980
gagccatgat	tgcaccactg	cactccaccc	tgggtaacag	aacgagaccc	tgtctcaaaa	2040
aaaagagact	aaagcagcat	taaatgaatg	cctgttctatt	caagcattttc	attttgtttt	2100
aaaactttta	accatttcat	ttctatgaca	taacatcagt	ttttctcatg	ccaagcctaa	2160
atatatatat	attcttgggg	atctgtgaact	tttctctata	agatacctct	gtgtcttttat	2220

```

tccaatgata attttagaaa ttagcataca cctattttctg catgatcttc ataactatac 2280
tgtaactttc tattagcata aaatttcagt gccacctttg tagcagtttt tacaacagcc 2340
ttggtactgc ataattcatt ttatgtattg acaagagatc tgattatagt tatgttggct 2400
tgtccaaatg tcacaattag ccagggtgtgg tgtctcacac ttgtgatccc aactcaggag 2460
gctgaggtgg gaggattgct tgagccc                                2487

```

<210> 68

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 68

```

aaacactgca agcagaatgg gtcaaaggag agagaggcac acaatttcag gccaggccac 60
aaagccagaa aagatctgga aaatgttact ggaggaaata caaaatcatc tggagtctaa 120
catttaaaga tagggtggta gattacgaga aaactaccat acagttcatg aggggtggggg 180
ggatcaaagc tatatttaac aaactcggct aggagcaagc tacatattta ttctgcctgg 240
aaagtacttc tggcagtgtc ttatttgctg tgtccaaaat tagtaatatc atgaataact 300
ataacttcaa aaatgaagaa tatgattctg tgttttatac tttctacatg cacttatcct 360
attatgtaac tgaacgggtgt ggggaaaaga gtatatctaa tatgaaagaa aaaacctctg 420
cccctgagaa gtccaaattc taaaaatgac ttaatcggcc aactgtgaca aaagcaaggc 480
tttgaacatc tcagtatccc tggagtctgt cttctcgtca ttcacttatt gccactgtga 540
cataccacgt gacagtctgc atggccagaa atattaatta ctgtctgggg aagatgggtat 600
tatatttaat actcctttac tctaatacct accattctcc aaaagtacaa tgaagagatg 660
ggcaggcctg gggatcta at gctttcatac atcaaaaggc gacacattcc cattgccacc 720
ataagttttg ctatatctgg gaagagggtca ctctttgaaa ttctatatgc aattttggga 780
aatagaatgg tgttcctttt tttttaccct cctaaaaaag aatgctgaag ttattttctc 840
tcttgccaaa aagagaagaa aaaaacgaga aggagaaatc agtttgagat ttgattgcgc 900
agacgtgaga acagaggcat tgccatacca tggcagatga ctcatccagc ctttaatcct 960
ggctccaaac cctggcctct gcctgaggat tcggagaaag gcaatatgcc attctaactt 1020
gtagaccatt tatttaacaa gggtttcctg acttaaacct tctctttact gcaaagctgt 1080
acattggagt atgctgattt atgaaataat aaggactttt aaagtattca agagctggag 1140
attatgttta aaaagaaata actgttttat cagacctaaa gttt                                1184

```

<210> 69

<211> 543

<212> DNA

<213> Homo sapiens

<400> 69

```

gtacattgaa aattgagacc tttggaggct tgtgcaagtt actgaatttg tgaagaaggc 60
ctcattttcc tttcttcttt ccagagtgtg tccttagtct cttcagctag tcatggctac 120
tactgttctg ccctcgtgag ccggtgtttg tctgccgggc ccgccttggc cacacagtga 180
aggctcattc cgtgtggtgg cttgggtgct tctgcacat ttggacacca agtctgtgtt 240
ggtcacacag tgaaggctca ttccgtgtgg tggcttgggt gcgtctgcac catttgga 300
ccaagtctgt cttggtctca cagcgaaggc tcattccgtg tgggtggctt ggtgcgtctg 360
caccatttgg acatcaagtc tgtgttggtc tcacagagaa ggctcgttct gtgcagtggc 420

```

ttgggtgggt ctgcacacgt ggaacacacc acgtgaccag aggggcctga gtcaggccta 480
cctggagtag ctcagggaag ctgtaaaggt gagaagcaaa ggcttctcca tgtgtttctg 540
gga 543

<210> 70
<211> 560
<212> DNA
<213> Homo sapiens

<400> 70
gtacattgaa aattgagacc tttggaggct tgtgcaagtt actgaatttg tgaagaaggt 60
ctcattttcc tttcttcttt ccagagttgt tccttagtct cttcagctag tcatggctac 120
tactgttctg ccctcgtgag ccggtgtttg tctgccgggc ccgccttggt cacacagtga 180
aggtccattc cgtgtggtgg cttgggtgcg tctgcaccat ttggacacca agtctgtgtt 240
ggtcacacag tgaaggctca ttccgtgtgg tggcttgggt gcgtctgcac catttgga 300
ccaagtctgt cttggtctca cagcgaaggc tcattccgtg tgggtggctg ggtgcgtctg 360
caccatttgg acatcaagtc tgtgttggtc tcacagagaa ggctcgttct gtgcagtggc 420
ttgggtgggt ctgcacacgt ggaacacacc acgtgaccag aggggcctga gtcaggccta 480
cctggagtag ctcagggaag ctgtaaaggt gagaagcaaa ggcttctcca tgtgtttctg 540
ggacgcagaa cgcgccta 560

<210> 71
<211> 546
<212> DNA
<213> Homo sapiens

<400> 71
tccaccctga tgagggagggc agatatcaga aggacactgc acatgataat gggggtgctg 60
tgaggggaata atggggggccc gggccttatg cagaggtggt gtcagggaag gccttgccca 120
ggggtgacat ctgagtttag agaggtcctg agaagaggcc tctctcaggt gctctggtca 180
tcagtccag gagcccagcc ttcgagtcac ccagcccgg gcaccagacg taagtgtatga 240
ggcttccaga tgattcctgc ccagctgtt cagggctccc agcagagaag agctgtaccc 300
acagagccct gcttggttgc ttgacctgcg gaatccatga ccctgttaca cccctaagtt 360
ctgtgatggt tcattataac aacagatcac cggaccatgg aaattacttc tctcttcta 420
ctctttaggc taactcgttt ttatataaac aactcatccc caccagaca cacacacaag 480
gccttagagc agcagtttcc gaacagtgcc gtatcccccg gggatctcta aaaaatactg 540
acaccc 546

<210> 72
<211> 676
<212> DNA
<213> Homo sapiens

<400> 72
tccaccctga tgagggagggc agatatcaga aggacactgc acatgataat gggggtgctg 60

tgagggaata	atgggggccc	gggccttatg	cagaggtggt	gtcaggggaag	gccttgccca	120
ggggtgacat	ctgagtttag	agaggtcctg	agaagaggcc	tcactcaggt	gctctgggtca	180
tcagtcccag	gagcccagcc	ttcgagtcac	cccagcccgg	gcaccagacg	taagtgatga	240
ggcttccaga	tgattcctgc	cccagctggt	cagggctccc	agcagagaag	agctgtaccc	300
acagagccct	gcttggcttc	ttgacctgcg	gaatccatga	ccctgttaca	cccctaagtt	360
ctgtgatggt	tcattataac	aacagatcac	cggaccatgg	aaattacttc	tcctcttcta	420
ctcttttaggc	taactcgttt	ttatataaac	aactcatccc	caccagaca	cacacacaag	480
gccctagagc	agcagtttcc	gaacagtgcc	gtatcccccg	gggatctcta	aaaaatactg	540
acaccagac	aatagggggg	aatcctaaaa	atacctgacc	aagactattc	aagattgtca	600
ggctcatgaa	aaacaaagaa	aagtctgata	ctacatcctg	gatggaacat	aacattaaaa	660
ctgagaaaat	cggaaa					676

```
<210> 73
<211> 451
<212> DNA
<213> Homo sapiens
```

<400> 73						
aaaaaaagaga	aaagaaaacc	caggaagttg	cctgataatt	ctttttcatg	actactgaaa	60
agatgggagc	ctgagagaga	cctaacagga	gtaaatactt	taaaaacaaa	ttgtatggaa	120
ctgtacccat	tctgaggatg	actgatacag	ttccagtatt	caaaagaagt	ataccttttc	180
cagcaaagca	gatcttttgt	ttacatagaa	aacattttgt	tatttgggaa	gtttgcttaa	240
ctattttgtaa	gtggctcttt	gcaattaatg	gattaccttt	ttttaatgga	aagaaaataa	300
attcaaaatc	cataagcaaa	actttagtaa	tttctgactc	taggatacta	gcctcttcta	360
tttcttatgt	gatttagact	caacattttc	cagtgagtta	agtacttaca	tcctctggct	420
gtatagctct	gcccatttgc	ctcgtaatat	a			451

```
<210> 74
<211> 453
<212> DNA
<213> Homo sapiens
```

<400> 74						
tgccatcatat	acattttctaa	ggactcctct	tctcagccat	ctcaagctgc	ttttatcata	60
agagatagga	ccttgctcat	tttgacaaga	ggaaccatat	accagctgt	gtcctccttc	120
catttgagta	aacttccaaa	acttgagcca	ctaaaagatt	ccattgctct	gaccacctaa	180
cagttctccc	aacatgggtc	agagagcaga	acagttctct	aagctggtag	ggggagagaa	240
gctctatcat	gtagagcag	acatgaatgt	gtaagggaga	ataagcagag	gagtgtgtgc	300
aataggcaaa	ccatatctct	gaagtgtgat	gagtataccg	aggtttctag	ctggaaaaat	360
gttcaggggtg	atgagataaa	gaatatctca	aagttttaat	caataaatgc	aaaccagcaa	420
aaatatcaat	aaaatatattt	taatgcctac	aaa			453

<210>	75
<211>	481
<212>	DNA

<213> Homo sapiens

<400> 75

```

tgcctcatat acattttctaa ggactcctct tctcagccat ctcaagctgc ttttatcata 60
agagatagga ccttgcctcat tttgacaaga ggaaccatat acccagctgt gtccctccctc 120
catttgagta aacttccaaa acttgagcca ctaaaagatt ccattgctct gaccacctaa 180
cagttctccc aacatgggtc agagagcaga acagttctct aagctggtag ggggagagaa 240
gctctatcat gttagagcag acatgaatgt gtaagggaga ataagcagag gagtgtgtgc 300
aataggcaaa ccatatctct gaagtgtgat gagtataccg aggtttctag ctggaaaaaat 360
gttcagggtg atgagataaa gaatatctca aagttttaat caataaatgc aaaccagcaa 420
aaatatcaat aaaatatatt taatgcctac aaaaaaaaaa aaaaaaaaaa aattggcggc 480
c

```

<210> 76

<211> 492

<212> DNA

<213> Homo sapiens

<400> 76

```

aattgaaata aatgggtctga tgctctctaa aatccttactg ttacatttcc ataaagttaa 60
aaatgcaaac aaagtaagac ctccttgatt tggaacatgt cagaaagata agggaaaacag 120
ttggtatgta ttctttattt agcaaagttg taatgcacag atttgacaaa tttaaagatt 180
ttttccccta gaatataatg taactttata ataagactag agatgtacct actgcatttg 240
atacccaaaa tgtatcattt ttttaatacct tcacttttat atgaaaattt actttaagta 300
atagtcatgt aataatacac agtaattatt attgtcctca ttccttcttt agttttaaag 360
catttaataa ttaaacacag gaataccttt taaagtatta aaatttagta aaaatatattc 420
atctgcaaaa cagaatttgc atttaccaaa ctcaagcatt ataccttgca gtttgtaatt 480
gtttcactgt tt

```

<210> 77

<211> 291

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (266)

<223> a, c, g or t

<220>

<221> unsure

<222> (268) .. (269)

<223> a, c, g or t

<220>

<221> unsure

<222> (273)..(275)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (286)..(287)
 <223> a, c, g or t

<400> 77
 tataaagtat tttcttatta cttctgctac aattttcaaa aggaattcct aggaaataca 60
 cacatataaa acttaagaaa ccaaagaacc atttcaaaga atattttaatt tctttgttgg 120
 tgctcaccaa attttcttat ataatttctg aaagaagtca aatgaaaaat taagttgata 180
 atgcttatag aagtatttaa aggcatttat aaattaaata cattacataa ttatcaattg 240
 aataaatgtt tctaccatat gcagantnnt tnnntttttt ttttgnnacg g 291

<210> 78
 <211> 870
 <212> DNA
 <213> Homo sapiens

<400> 78
 ggcccattca gtaaataattt cttaagactc tactttgtgt ataacaaatt gattgtcaga 60
 gcttattcat aaactatctt ataatggtgc aaatcaactc acaaggcctt tgtctaataa 120
 aagacagctg tgctgacagc tgcttgctct cttcaacacc tgatgtgctg gaaggttcca 180
 cagtaaagca cttgaaacct tgaagtcagc cctactgtct ggataagaac ccattctctc 240
 ttaaactttt gaaatcaagg cttattaaat ttgattccta gaaacttaac gctagaccat 300
 atttatcaag ttttaaattg ataaaattta aagtttttga gaagaaaagg gggaaaatat 360
 gacaaaaaca ggccttaagt tccaaggaag ccagtcctc agaaaccca ttccataatc 420
 acccagttgg atgaaccaa gtagctttta cctcccaagg acagagcttc tcagaaaatg 480
 gggcaaaaaa tctccagaca gccctactca gggtcctggg ctctgttctc atgttctgac 540
 ccccagaagg cctctaaatc actcaacttg gagactcgcc agttttttct aatcagctgc 600
 ctgaaagcgg ttcagagttc tgtcaacaag cccttgacg ctgggcttat taatgctggg 660
 ccactcagag ccatgactca ggaacatggc ttgggggtcaa cactgaaaag cagaaatcac 720
 agtactgata atgggaattt tgtaggagga aacaggcttt tggaacttaa tgcctttgtt 780
 aggtttctgg atttgcagat ctcatgtgt gggcctgctt taggaggaaa agctgggatt 840
 cataacaatc taataaacct gacccaaacc 870

<210> 79
 <211> 576
 <212> DNA
 <213> Homo sapiens

<400> 79
 cccctcttgt atttatgatg gtttttcttt ctacttgatt aagaagaaag tacaaaaagg 60
 tgcttattga agcattgtca atttggaac aagattctca ggaatgaaat atttgtgact 120
 gttctcagca tgaaaggtag agagaagatt acttgatcat tatgtgctta tttgaaagtc 180

```

actttcctcc catgcctcaa catctcactt tttagaatgc acactgaatg cctggaatct 240
ctttgtttta gaaaagacaa agttgcattg ttaaaaaaat aatatttctg gggaaaaggc 300
tcagtgtcca acggttactc tataaagaga tttaaaaaga aagtcaaggg aagataagga 360
aggtagcatg gctaacaacc tcgtgggttc tactagcatt atttcatgca aaatgtcatt 420
aacctttata taggagagaa taagtctggg aatcaactgg catctaaact ccatttcttg 480
ttttgtcact gcttccctgg ttgactatgg aaaagacatt tggctctttg aaaccttgcc 540
cccaacaact ataacatgac ttaaatcat ttatgc 576

```

<210> 80

<211> 905

<212> DNA

<213> Homo sapiens

<400> 80

```

ctgacctcca gttttctgtc aaagaacttc tgctcatatc caattcctat aaagtgggag 60
tactctaacc tgatattacc aacattaggt tagattttat cctaattgta ggtattagaa 120
tatatcctaa cattactagt tcttctactc tactaaagtg catgttagat ttcttcaatg 180
atTTTTTTTaa attggcatgg ttgatacaaa gcatccttct atccaaatac tgtgtcagtc 240
cgcctaagtg atagtttaga accatactat ctctctgtgg aaagaatgct ggggtcctg 300
gctacacact ttgagtagaa gggaaaatac ccctcttgta tttatgatgg tttttctttc 360
tacttgatta agaagaaagt acaaaaagggt gcttattgaa gcattgtcaa tttgggaaca 420
agattctcag gaatgaaata tttgtgactg ttctcagcat gaaaggtaga gagaagatta 480
cttgatcatt atgtgcttat ttgaaagtca ctttctctcc atgcctcaac atctcacttt 540
ttagaatgca cactgaatgc ctggaatctc tttgttttag aaaagacaaa gttgcattgt 600
taaaaaaata atatttctgg ggaaaaggct cagtgtctca cggttactct ataaagagat 660
ttaaaaagaa agtcaaggga agataaggaa ggtagcatgg ctaacaacct cgtgggttct 720
actagcatta tttcatgcaa aatgtcatta acctttatat aggagagaat aagtctggga 780
atcaactggc atctaaactc catttcttgt tttgtcactg cttccctggg tgactatgga 840
aaagacattt ggtcttttga aaccttgccc ccaacaacta taacatgact taaattcatt 900
tatgc 905

```

<210> 81

<211> 622

<212> DNA

<213> Homo sapiens

<400> 81

```

tgagattttct ttatagtcct ctgtaggtaa gggttgattt tgaaattttg gctgcttgtg 60
tttaagattt gattctcatt ctcaaacatt tacatgtata attttgagaa cacattttat 120
ttaacacaat atagtaaaca gaatgaatca taactatgaa cgttttccag aagcatttct 180
tagataaatt attttataaa aagaaaaaca acacaacatc taagatttag agtggagaa 240
tatacttgta gttaacttcc ttgttgattt aaaaaatata tttggattta ttttggcagg 300
gtgggggaat catctaataa aaaatttaaa gcaaaacttca ttttttctaa ccagagtga 360
gagacaggga gagaatcaaa tatgtgtgag ctccctctgt tgctctgtaa cagcatttta 420
ttcatgattt gtgatgtgat aaggaaattt ttgctaattg gtcaaaacaa attcaatttt 480
cctttaaggc aatttataac tttattttaa tggaatataa aggaagaacc ccctatatgt 540

```

aaaattctga ccttcaaatt tatgttaata tttttaaaatt attaaaacat taaaaatgca 600
tctattttctc accactaaga gg 622

<210> 82
<211> 1079
<212> DNA
<213> Homo sapiens

<400> 82
gaaagatcta aatatccctg cacctcaagt agtacctatc atatgtagac accatataaa 60
tatttgtggt gaatttaata aactcaggct gaacctactc tgcataatatt gtgatgactt 120
tcagattaac ctttagacac attcacaggg ttactctctt ggaagatctc tagggatcct 180
catttatttt ggtctttggg gttactgtat gttctgctgt tgggtgtttt tactctttga 240
gtattgtttt tcttccttta caaagatagt gtacatgttt attgttgggg gggagtcaaa 300
tcatatcaaa tgatagaaaa tgaaagccat ctccctagtt ctattcccca gaagagacca 360
ctgataagag tgtagtgtgt atcttttaag actattttca gcacatacat acatacgtat 420
tttgcacata tatggcataa ttaatatatt gttctaaaat ttacattttc atctatctag 480
ctagctagct atatctcacg tatttccaag tgcagtattt tggaagtgtt aaatagtcag 540
attagggcca tgtttggtat tgtgactttg ttccctgacct gggtagagtg ctgtgcttag 600
ctgacatatt ttacaatcca gtgatcactc ctgacattat ttgcagagtg ctcttaccag 660
cagaggagaa agagctactg tcccaaaga ttggagcaaa tagccctgag ggaagtggaa 720
aatgtctttg gagtgttatt tcttttatct taaaatttag tgcagatctt gcattcaaag 780
acatcatggt atatctgtgt ttgtttcctt tgtttttaca aggagtttct cccaaaaaac 840
tgaacctgaa gtaatggtca ctccaggaat ttatgtcttg tttatcctat ggcttcaagt 900
accttcagtg tattgccaaag tactgctcat gtacactcca gctgagaaat acagtgttag 960
gtttccaaca aaagtaccta aggatttccc acagttcact taagaaggat gcaaaagatg 1020
ttactggaat aatcatagtc gcagttagct gtagaataaa ggacaggacc cggtatggt 1079

<210> 83
<211> 331
<212> DNA
<213> Homo sapiens

<400> 83
gtcgggtattc atctcccctg ttgggaaagg tttaatctca tgggttattt cccaaaacct 60
gctttgttgc tctctcattt gtaaagcatg caatatcagc tggagagagg aaggcactgg 120
aaagaatgct ttggtcactt tacatcagtt ttaaagtagt ggcaaataag agaatgccta 180
ttcagggcat ttattggcac ttccatgggg ggtaggctct gaagtttctt gtggcagggtg 240
agtgaaaagg ctgggaagaa ggccaaggat gaaattgatg tggagaagag gatctggctg 300
acttttcctt gagaattcta agggatattt c 331

<210> 84
<211> 437
<212> DNA
<213> Homo sapiens

<220>
 <221> unsure
 <222> (362)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (399)
 <223> a, c, g or t

<400> 84
 gtattttcca gttattcact ttcactttat aaacatgaca cttttgttaa gattataaaa 60
 atgaattttg actgtgcac tgcaatttta gacattttcg ttatgattgg taatagaaca 120
 ataaaatgtc tagccttgta aagagttaag tttacttaca agacagacat catctaattt 180
 gcaacaagga ttaaagcccc actctgaatt aaaattttctg ctggaaagat ttgaggcact 240
 ggcaaactgt caaaggtagt attgtgcgag agtaaccagc ttttgcaaga cctgtgaaag 300
 taaatctctt cggccagagt ttcttaggtg tgtgaactta tgatgatcag gaatacattg 360
 gnggattccc actagagaaa cgcaccatta atagttaang ctttcacttt ctggtttcac 420
 ttgttgccct cataaat 437

<210> 85
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 85
 gcagtatttc actgccacct gccaccaggg tttaaacagg ggagtagcag ggagctatta 60
 gggaggaggg gattgaggga tttttactaa ggcagaggca ggtgatagat ttgagatttg 120
 caaagtcaga acttgaggcc cagttgagga atagcattac aatgttagca gcgttgtag 180
 gcgagcaca gacttcacag gtgatgctag ttcacaaaa tgtgaacca cattaactgg 240
 ttttcctttt gaatgtgatg gttccaagag gtttgagtc agtggagatg tgtgaaaggg 300
 cttggagggtg gaaatctggg taagaatgcc aagggcattc ctggtagatt aaaatggtaa 360
 agcaagcaac agatctggaa aagaactagg agaaactgtt agtattttct ggggtgtcaac 420
 gtagggaaag gcgttctaag cgttttcctt ataaataatg aaaaaatgtt aaaaagccaa 480
 aaaaaaagtg ggggggagact gaaaattgag attatataga aaattg 526

<210> 86
 <211> 440
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (144)..(169)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (178)..(179)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (181)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (218)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (403)
 <223> a, c, g or t

<400> 86
 gctcgagtgt taaagtaata agtaacaaaa taattagaaa agttagaaaa ataatgacta 60
 tttggcaaag atattttctca tacaatgaga aatatctttg tccaattagt ttaaaatctg 120
 atgtagagaa actgtatatc tatnnnnnnnn nnnnnnnnnn nnnnnnnnng atacttanna 180
 nactacttta gtttttagag tagtttttagt ttccggcnaa aatgagcagg tacagagAAC 240
 atttttgttt acaatctaga caaatgtatc cattgtgtac aaattcattg aaaataatgt 300
 tatattatgt tatatgtgta ctcaaatact ctgggttgta attcagcaaa acactgggtt 360
 ttaacaagta gcttcatctt cattttttgtt attttcaata aanacaaatt cttgtcatta 420
 tgcaacaagg ttataataaa 440

<210> 87
 <211> 95
 <212> DNA
 <213> Homo sapiens

<400> 87
 acaggcgtga gtgccactgt gcctgtctca ttccctcttc attattagct ggaatacttc 60
 cagaaagaga catttccctt actgactgaa acaat 95

<210> 88
 <211> 416
 <212> DNA
 <213> Homo sapiens

<400> 88

cgcttgtgtg gggcaggggg tatatgggaa ccccatataa ttttactgtg aatccaaaac 60
 tgctctaaga aagtctggct tttttttttt ttttctgaga cagagtttca ctctgtctca 120
 ggctggagtg tgatggcacg atctaggctc actgcaccct ccacttccgg gttcaagcga 180
 ctctcgtgcc tcagcctctc aaagtgcctg gattacaggc gtgagtgccg ctgtgcctgt 240
 ctcatccctt cttcattatt agctggaata cttccagaaa gagacatttc ctttactgac 300
 tgaaacaatt ttttgaattt tatttattta tatatgagag ggagttttgc tcttggttgc 360
 taggctggag tgcaatggcg tgatctcggt gcactgaagt ctccgcctcc tggatt 416

<210> 89
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 89
 cttccagaca gctggccagt tatgttactg aaacagatat gtttctgaaa catacctatg 60
 gctatatatta tacctgggtt ttaaaacttt gagtcttatt ggcttcttct ggtacatttt 120
 ttattttgtaa tttgtcagaa tttcagtatc tgagagtata cattctgaat tttatagttt 180
 tagatcatgc aattacactt atttttcctt gcttttgaaa aagtaaagt gcttcctatt 240
 ttcttaatga tcagttatct ttttttggtg 270

<210> 90
 <211> 148
 <212> DNA
 <213> Homo sapiens

<400> 90
 gatggatggt gttacttagc ttgaagaagt acattaaact gcactgggtc ttggcaaacac 60
 gtcccacgtg ccatgctagg catgcaatgg attctgatct tttattgtac aagtgggtgta 120
 aattctgatt catgacgata tgttggtg 148

<210> 91
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 91
 acaaagtca tcaactgatag aaaggttcag taacttactc aagaccacaa aattaggtct 60
 ttttgaaaat taaaaaaaaat tcaaacccag gatataaact caggtttatt ttattcccaa 120
 gcctattaat ttcaagttac agttattatc aaactgtatg tttcttaagg caggatctga 180
 gttgtgtaat catttatccc catagtagct tgcccttaag aggtacttag tacatatattt 240
 ttgatgaatg atgttggtaca aataatgggtg tcctgtataa taggttatgg tttaaaaata 300
 gaggaagtct ataggactct tagaaagtac ttcagatata tgagaagact aagattgaga 360
 acttcttgga ggtctaattc taaattaaac ttccaagttg ggatgcaaaa ataaggagga 420
 tgtttggaaa catcccatga tttatattta cataagcttc ataaggagaa tgaatacaga 480
 ctgacctttg cttgagagcc atgtgatggc cagagaaagc ggcatgggtt aacagccaaa 540


```

aggaaatcag cattatacta aagcagtgtt tctcaaagtg tgttccaggg aaggatatac 600
ccaagaaaca atatccatca agagacttct ataaaaagag gagataattt aatacatata 660
gaagcatgac atagtccac ggatccctga acaatacagg ggttgggggc attgaccctt 720
gtgcagacaa aaatctgcat gtaacttttt tttgagacag agtctctctc tgcactccag 780
cccgggcaca gagcaagacc ctgagacctt gtcagaaaaga aataaagaga gaaagagaga 840
ggagagggag agg 853

```

```

<210> 92
<211> 801
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (553)..(676)
<223> a, c, g or t

```

```

<400> 92
cggagagaga ctctgtctca aaaataaagt aaatgaaata aatcttacgt ttaaaagccc 60
tttttcatgg attttcctca gagactttgc agaaaccaag gggtcagtta tttatcagtt 120
ggaacatttt ggactttatg atcacaaatg ctttttaatc tgtgtaactt catctacaga 180
aaaccatggg ccattaagac tagagcgatc cctctatctc ttcatgccag gcttctacca 240
gggagataac ctgtacacat tactcacgag catagtgcgt aatccacata gggtaatgtc 300
tgcagatttg agtatgtgtt ccctaattct ttatctagca tgtagagtat aaataacaca 360
atactggatg cttttatgga tgaacaagga ataataccta gcacctttct tctagaagtt 420
tatagtatga agagagaaga taagatgcat ctgagaaaact agattaaact tgacattgtt 480
tgatcaagag ccacgtgagc aataccaaca tgggttgaga cagaggagaa atccatcgtg 540
gtgaatctag agnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnnccac ctctgcccc ggtacacacg gttggtataa ccaaaagtat 720
ctccaggtgt tgccaaatct gatctagagc aagaaaaaac atggaacatg aaaacagtgt 780
gtttaaaata aagccagaga g 801

```

```

<210> 93
<211> 280
<212> DNA
<213> Homo sapiens

```

```

<400> 93
gagaacagga ccccatgct gcacagccct ggcttaacgc gggggtggcc ccagaagcgg 60
gtgggcgagg ctgggcagca gggattggct gaaatcatat gcagagccca agaggcaggg 120
gaaaggcggc aatttcaggg tccctttgtt cgccaggtac ctggggccca gcccgggcgg 180
caggagggac tcagccctc gcccaggcag gaagggtccc aagcagaggc ccctccctca 240
ggcactcccc agccacacc tgcagcactg ggccaagact 280

```

<210> 94
 <211> 829
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (784)
 <223> a, c, g or t

<400> 94
 gaacaggacc cccatgctgc acagccctgg cttaacgcgg ggggtggcccc agaagcgggt 60
 gggcgaggct gggcagcagg gattggctga aatcatatgc agagcccaag aggcagggga 120
 aaggcgga tttcagggtc cctttgttcg ccagggtacct gggggccagc ccgggcggca 180
 ggagggactc agccccctgc ccaggcagga aggggtccca gcagaggccc ctccctcagg 240
 cactccccag cccacacctg cagcactggg accaagacta ataaaacacc cgcctcacgg 300
 aagacagctt tatcttggtg atcggaagtc tgccagccca atttatgatg gaacataaga 360
 tctctaaatc tgaatttaca ctctgtagcg taacgagagg tcaataagat taaacggggg 420
 ctcaggagag gaccagcgtc aggctcactg cgagggtgctg cacagaaaac ccacagccag 480
 agccccctggg cccagcccag gcaagaccag aaaaggaggg ggcagggtggg agaccagcct 540
 ggggctcccc ggaagcccac gggatggagg cgggagagcc aggaggcctg gggcaaccct 600
 gggacggttc ctggatcgag gagagcaggg gggatgatg ggttccctca gggctgggga 660
 gccttctcct ggtctcagac ccacccccct tcagctccca agccctgggt gccctgggt 720
 ctgaggacag tgggaatctt ccctgaggca ggttcaagga cagagctctg accctgtgcc 780
 aggnctgctt tgggtgccta tgaactcggg tctggctcag agcagtcct 829

<210> 95
 <211> 170
 <212> DNA
 <213> Homo sapiens

<400> 95
 gataaccagt aggcagcagg ctactcctgg ttcgtaacat aactccacca gtgtattctg 60
 gcagccgggc ttacttaagg gagagcacag acattccctg ctcaaaaaca aaactgctaa 120
 acgtgactcc ggtagcctcc atgctctctg caagaataaa atccttgaag 170

<210> 96
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 96
 caaatttgaa atcttaaaat ttaagaaact agtggaggaa ttggatagta catgatttca 60
 aaaacatgaa aactgaggac attaaatgtg caagggttag aagtttgctg catgcaaagg 120
 ggaaagtgaa gatagcattt tttcacatag tttcagaagt ccagttgctg aggttaatca 180
 atgaaagttg tagcatcaaa ggtttaacat aaaacaactt cctaaaatca gccagggtgca 240

<212> DNA

<213> Homo sapiens

<400> 99

```

ggtacatctt ggctgtggat ggaaatthtga catactthttt atthttcttht cctgtttacat 60
atcaaattctt aggatgtatt acttccaagg cggthtaaact tattcaagat tgactgagtc 120
tcctatthttt cttaaatttht ctagaagtga ggctccaaga actacagaaa atagaaggaa 180
agtctccatt gagccatgaa ctgtgagcac ctggcatttht agcatgaaga gtagggcttc 240
tatggtagggg actggagtag gcagcattcc aggaaaggat ctcagaggtc agaaacaata 300
gattatcagt taaatacttc tggaccaaag aagaccttga aatcctggct cggtgatgta 360
tacatatttht atacacaatg agaagctcct tgagggtgag tgagagtgat agggctgaag 420
aacaggagac agaagacaat tcaaattgtcc ttacacagaa gactgattat atagataatg 480
gtacattcat ataaacatga tatatttact aattaaaaca taccaacaca cacaacacct 540
cgagccgcta gtctcgagtc tag 563

```

<210> 100

<211> 667

<212> DNA

<213> Homo sapiens

<400> 100

```

cggcaagctc taatgggaag gatacgccct gatcacacac tcctatthtca aaggggtcca 60
gtaccagcac ctctcaccag tggctctacac tattatacaa ctttagaaga actctggaaa 120
agthtttgatc thttgtgaaga ctatthttaa cctccatttg gaccatatcc tgaaaagagt 180
gggaaggatt ccttggttht catgaaatgt tcattgttht ggthctgtcc gtgggtcaaaa 240
gaattgcctt tccagcctcc ggagggggagc atthcttcac acctaggatc aggagccagt 300
gacagtgaga ccgaagagac ccggaagca ctacctatac aatcatttht acatgaaaaa 360
gagtctcacc aacacagaca aactcgggtc ccagtcatca gtcgcccagg ttccaacgtc 420
aaaccacccc tccctccaat cctcagggc cgcaggtaga ctagcacttg atgtctgatc 480
ctaacatgga aaacctgtc tgctgatgtc gaattccttg ccttacctgg ccatgggtcc 540
agctgtthtct cactcaaccc attaccacg gaagaatgtg thtacctgcc ttaattctat 600
cagccagtht ctcttgtgat tctthtggtg gtgtcttht gthththta taaaaaattg 660
thtctta 667

```

<210> 101

<211> 3734

<212> DNA

<213> Homo sapiens

<400> 101

```

gagtatacat cthththtcagc actgcacaac acctattcca aaattgacca catagttgga 60
agtaaagctc thctcagcaa atgtaaaaga acagaaatga taacaaactg thctctcagac 120
cacagtgcaa tcaaactaga actcaggatt aagaaactca ctcaaaactg ctcaactaca 180
tggaactga acaacctgct cctgaatgac tactgtgtac ataacaaaat gaaggcagaa 240
ataaagatgt ththtgaaac caacgagaac aaagacacaa cataccagaa thctctgggac 300
acattcaaag cagtgtgtag agggaactth atagcactaa atgtccacaa gagaaagcag 360

```

```

gaaagatcca aaattgacac cctaatatct caattaaaag aactagaaaa gcaagagcaa 420
acacattcaa aagctagcag aaggcaagaa ataacctaaa catcagagca gaagtgaagg 480
aaatagagac acaaaaaaac ttcaaaagaa ttaatgaatc caggaactgg ttttttgaaa 540
ggatcagcaa aattgataga ccgctagcaa gactaataaa gaagaaacga gagaagaatc 600
aaatagacgc aataacacac atgataaagg ggatatcacc acgatcccac agaaatacaa 660
actaccatca gagaatacta taaacacttc tatgcaaata aactagaaaa tctagaagaa 720
atggataaat tcctggacac atacaccctc ccaagactaa accaggaaga agctgaatcc 780
ctgaatagac caataacaga ttctgaaatt gcggcaataa ttaatagcct accaaccaaa 840
aaaagtccag gaccagatgg attcacacct aaattctacc agaggtataa agaggagctg 900
gtaccattcc ttctgaaatt attccaatca ataacaaaag agggaatcct ccctaattca 960
ttttatgaag ccaacatcat cctgatacta aagcctggca gagacacaac aaaaaaaga 1020
gaatttagac caatatccat gatgatcatc gatgcaaaaa tcctcagtaa aatactggca 1080
aaccaaattc agcagcacct cataaagctt atccaccacg atcaagttgg ctccatccct 1140
gggatgaaag gctggttcaa catacgcaaa tcaataaagg taatccatca tataaacaga 1200
accaaagaca aaaaccacat gattatctca atacatgcag aaaaggcctt tgacaaaatt 1260
caacagccct tcatgctaaa aactgtcaat aaactagtta ttgatgggac atatctcaaa 1320
ataataagag ctattttatga caaaccacaa gccaatatca tactgaatgg gcaaaaactg 1380
gaagcattcc ctttgagaac tggaataaga cagggatgcc ctctctcacc actcctattc 1440
aacatagtgt tggaagttct ggccagggca atcaggcagg agaaagaaat aaaagggtatt 1500
caattaggaa aagagaaagt caaactgtcc ctgtttgcag atgacatgat tttatattta 1560
gaaaacccca tcgtctcagc ccaaaatctc cttaagctga tgagcagctt cagcaagggtc 1620
tcaggataca aaatcaatgt gcaaaaatca caagcattcc tatacaccaa taacagacaa 1680
acagagagtc aaatgagtga actcccattc gcaattgctt caaagagaat aaaataccta 1740
ggaatccaac ttacaaggga tgtgaaggac ctcttcaagg agaactacaa accactgctc 1800
aacaaaataa aagaggacac aaacaaatgg aagaacattc catgctcatg gataggaaga 1860
atcaatattg tgaaaatggc cataatgccc aaggtaattt atagattcaa tgccatcccc 1920
atcaagctac caatgacttt cttcacagaa ttggaaaaaa ctactttaaa gtccatatgg 1980
aaccaaaaaa gagcccgcat tgccaagaca atcctaagcc aaaagaacaa agctggaggc 2040
atcacactac ctgacttcaa actatactac aaggctacag taacccaaac agcatggtac 2100
tggtaccaaa acagagatat agaccaatgg aacaggatag agcccttggg attaatacca 2160
cacatctaca accatctgat ctttgacaaa cctgacaaaa acaagctatg gggaaaggat 2220
tccttattta ataaatggtg ctgggaaaac tggctagcca tatgtagaaa gctgaaactg 2280
aatctcttcc ttacacctta tacaaaaatt aattcaagat ggattaaaga cttaaattgtt 2340
agaccgaaaa ccataaaaaat cctagaaaaa aacctaggca ataccattca agacataggc 2400
gtgggcaagg acttcatgac taaaacacca aaagcaatgg caacaaaagc caaaattgac 2460
aaatgggata taattaaact aaagagcttc tgcacagcaa aagaaactac catcatagtg 2520
aacaggcaac ctacagaatg ggagaaaatt tttaaaatct acccatctga caaaggacta 2580
atatccagaa tctacaaaga acttaacaaa atttacaaga aaaaaatcaa acaaccccat 2640
caaaaattgg gcaaaggata tgaacagaca cttctcaaaa gaagacattt atgcagtcaa 2700
cagacacatg aaaacatgct catcattact ggccatcaga gaaatgcaaa tcaaaaccac 2760
aatgagatac catttcacac cagttagaat ggctagtatt aaaaagtcag gaaacaacag 2820
gggtccagta ccagcacctc tcaccagtgg tctacactat tatacaactt tagaagaact 2880
ctggaaaagt tttgatcttt gtgaagacta ttttaaacct ccatttggac catatcctga 2940
aaagagtggg aaggattcct tggtttccat gaaatgttca ttgtttcggg tctgtccgtg 3000
gtcaaaagaa ttgcctttcc agcctccgga ggggagcatt tcttcacacc taggatcagg 3060
agccagtgc agtgagaccg aagagaccg gaaagcacta cctatacaat cattttcaca 3120
tgaaaaagag tctcaccaac acagacaaca ctcggtccca gtcatcagtc gcccagggtc 3180
caacgtcaaa cccaccctcc ctccaatccc tcagggccgc aggtagacta gcacttgatg 3240

```

tctgatccta	acatggaaaa	cctgctctgc	tgatgtcgaa	ttccttgcc	tacctggcca	3300
tgggtccagc	tgtttctcac	tcaaccatt	accacggaa	gaatgtgtt	acctgcctta	3360
attctatcag	ccagtttctc	ttgtgattct	ttggctggtg	tcttttagtt	ttttaattaa	3420
aaaattgttt	cttacaaaa	aaacggtatt	cctggaggcg	attactggta	cgcaatctag	3480
gcaatgctcg	attcagccca	ctacacctg	cccctgtggg	ccccagtg	ggaccttgc	3540
ggccccccct	ttttgtgggg	ggttaacgca	tagccccctt	taaaggatac	cgttcccccc	3600
ggcctgcagg	ttggcacaac	aggtttaatc	ctagtaaagg	ggggagatcc	cgctcttccc	3660
acaatcgagg	ggccccgaac	aaaaataacc	tgtaatcaat	gaggcccgac	aaggccagaa	3720
cacacaagag	cggc					3734

```
<210> 102
<211> 353
<212> DNA
<213> Homo sapiens
```

<400> 102						
gtggatggca	gcacagattt	agtgtctggt	tttgtcagac	ccatagctgg	tgaggaaaac	60
agttaaccgg	aatggaaatg	aaagaaagt	gttcgaggtg	acagcaaagc	aaagaacaag	120
caaagcatag	ctggtaacag	aaaaaaagac	tgaggaatga	taaacaatgg	acgtaagaac	180
tccaaggcca	gcaataggag	gccatctaga	ggaagcggcc	agcacacctc	gatagccata	240
gggcagcgct	gtttgtgcca	ggaggaaaat	gatgtacaga	tggtgacact	aggacatgaa	300
gaaagggtta	ggcgatgttg	agaaacctca	ttttaagaag	acacacagtc	gga	353

```
<210> 103
<211> 484
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> unsure  
<222> (8)  
<223> a, c, g or t
```

```
<220>  
<221> unsure  
<222> (11)  
<223> a, c, g or t
```

```
<220>  
<221> unsure  
<222> (285)  
<223> a, c, g or t
```

<220>
<221> unsure
<222> (427)

<223> a, c, g or t

<400> 103

cggctcgnag	ntgttacagc	tatggataat	agtgttatct	aagctgagtg	tattgaatac	60
tttcatctag	atgtcttaaa	aggacttttag	taggatataa	aaagaaaata	aaaaggaatt	120
ttaaaaatca	aattaaggca	aacaatctct	acacattttc	ccccttgat	ctatgccttt	180
acatttaggt	tataaaagtc	gccccctcc	ccagtccac	ggattagcca	actatctttc	240
cgtttttgat	tgtntggtag	tgagtactgg	agaatgaatg	ctgtnttta	tattatgtat	300
ttttttcata	actgaaattg	gcgttagaag	attggattaa	aaaacatgag	acctaacatt	360
ttagataatt	gtaaatatag	tgtaagcagg	aagatattta	ctattttcaa	taataaagac	420
ataaatnact	tgttttctgt	attttaagaa	acttttgctg	gtatttgata	ttttaaaaaa	480
taag						484

<210> 104

<211> 119

<212> DNA

<213> Homo sapiens

<400> 104

gagttttact cgcattccgat gagaaagggtg tgtgtacctg ctttcattgac gatagagagc 60
agacaacttc tttctggagt ttcagcttgc ttccaacagt gaaggaggaa ctgaaattt 119

<210> 105

<211> 290

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (19)

<223> a, c, g or t

<400> 105

gtttaatatc	tcataagcna	tacacacctc	gaagccatca	atgacaacct	tttcttgctg	60
aatagaacag	tgattgatgt	catgaagaca	attttatctc	cttttgctt	ccataatttg	120
taccagtgtt	tgtcacgtgg	ttgttgaata	aatgaataaa	gaatgagaaa	accagaagct	180
ctgatacata	atcataatga	taattatttc	aatgcacaac	tacgggtggt	gctgaactag	240
aatctatat	ttctgaaact	ggctcctcta	ggatctacta	atgatttaaa		290

<210> 106

<211> 1645

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (60)

<223> a, c, g or t

<400> 106

tttccttgaa	attaagttca	ggtttgtctt	tgtgtgtacc	aattaatgac	aagaggttan	60
atagaagtat	gctagatggc	aaagagaaat	atgttttgtg	tcttcaattt	tgctaaaaat	120
aaccacgaac	atggataatt	cattttattaa	ttgatttttg	taagccaagt	cctattttgga	180
gaaaattaat	agtttttcta	aaaaagaatt	ttctcaatat	cacctggctt	gataacattt	240
ttctccttcg	agttcctttt	tctggagttt	aacaaacttg	ttctttacaa	atagattata	300
ttgactacca	ctcactgatg	ttatgatatt	agttttctatt	gcttactttg	tattttcta	360
tttaggattc	acaatttagc	tggagaacta	ttttttaacc	tgttgcacct	aaacatgatt	420
gagctagaag	acagttttac	catatgcatg	cattttctct	gagttatatt	ttaaaatcta	480
tacattttctc	ctaaatatgg	aggaaatcac	tggcatcaaa	tgccagtctc	agacggaaga	540
cctaaagccc	atttctggcc	tggagctact	tggctttgtg	acctatgggtg	aggcataagt	600
gctctgagtt	tgtgttgcc	cttttgtaaa	atgaggggtt	gacttaataca	gtgattttca	660
tagcttaaaa	tttttttgaa	gaacagaact	ttttttaaaa	acagtttagat	gcaaccatat	720
tatataaaac	agaacagata	caagtagagc	taacttgcta	aagaaaggat	ggaggctctg	780
aagctgtgac	ttcattatcc	cttaatactg	ctatgtcctc	tgtagtacct	tagattttcta	840
tgggacatcg	tttaaaaact	attgttttatg	cgagagcctt	gctaattttcc	taaaaattgt	900
ggatacattt	tttctcccat	gtataatttt	ctcaccttct	atttaaaaaag	aaaaaaaaaag	960
tcagtgtagt	atttacatat	tttaccctat	aaggagctaa	cataactttt	gatttagtgt	1020
tattcataaa	attagggttag	cagttttatta	accttttgta	tttgctctgg	caatgtttaa	1080
tatctcataa	gctatacaca	cctcgaagcc	atcaatgaca	accttttctt	gctgaataga	1140
acagtgattg	atgtcatgaa	gacaatttta	tctccttttg	ccttccataa	tttgtaccag	1200
gttatataat	agtataacac	tgccaaggag	eggattatct	catcttcac	ctgtaattcc	1260
agtgtttgtc	acgtggttgt	tgaataaatg	aataaagaat	gagaaaacca	gaagctctga	1320
tacataatca	taatgataat	tattttcaatg	cacaactacg	gggtggtgctg	aactagaatc	1380
tatattttct	gaaactggct	cctctaggat	ctactaatga	tttaaattcta	aaagatgaag	1440
ttagtaaagc	atcagaaaaa	aaagtgggta	ttcctacaag	tcaggacatt	ctacgtgact	1500
acaatataat	ctcacagaaa	tttaacatta	atacattcta	agattttaatt	cttagattct	1560
tggtaaacaa	attgctcctg	tggagatgat	tggcatcaca	tgggtgttttg	agctgataca	1620
ccaacactt	qagctcactg	caaca				1645

<210> 107

<211> 2241

<212> DNA

<213> Homo sapiens

<400> 107

gggcctgatt	tcagtttctt	ccagcccttc	ctattgttaa	catggggggt	gtgttgaaga	60
atataaaagt	acaaaagtcaa	ggaagtagga	aacattttta	caagtattat	gtagccatct	120
tggtggagcg	gtggtgaggt	aggctgcaaa	tgattctcct	atttctttcc	ctgagttcag	180
aacataggaa	ttagattgat	agacatcaac	ataccgcctt	tattgctgac	tcatgacaac	240
taatgggaag	acatggctca	gatgtgcagc	cacagtgagc	ttctgaacat	ttcttctcag	300
actaagctct	tacacacagt	tgcagttgaa	agaaagaatt	gcttgacatg	gccacaggag	360
caggcagctt	cctgcagaca	tgacagtcaa	cqaaactca	tgtcactgtg	qqcagacaca	420


```

tgtttgcaaa gagactcaga gccaaacaag cacactcaat gtgctttgcc caaatttacc 480
cattaggttaa atcttccctc ctcccaagaa gaaagtggag agagcatgag tcctcacatg 540
gaaacttgaa gtcagggaaa tgaaggctca ccaattatth gtgcatgggt ccaagttttc 600
cttgaaatta agttcaggtt tgtctttgtg tgtaccaatt aatgacaaga ggtagatag 660
aagtatgcta gatggcaaag agaaatatgt tttgtgtcct caattttgct aaaaataacc 720
cagaacatgg ataattcatt tattaattga ttttggttaag ccaagtccta tttggagaaa 780
attaatagtt tttctaaaaa agaattttct caatatcacc tggcttgata acatttttct 840
ccttcaggtt cctttttctg gagtttaaca aacttggtct ttacaaatag attatattga 900
ctaccactca ctgatgttat gatattagtt tctattgctt actttgtatt tctaatttta 960
ggattcacaa ttttagctgga gaactattht ttaacctgtt gcacctaaac atgattgagc 1020
tagaagacag ttttaccata tgcattgcatt ttctctgagt tatattttta aatctataca 1080
tttctcctaa atatggagga aatcactggc atcaaatgcc agtctcagac ggaagacctt 1140
aagcccattt ctggcctgga gctacttggc tttgtgacct atggtgaggc ataagtgtct 1200
tgagtttgtg ttgcctcttt tgtaaaatga gggtttgact taatcagtga ttttcatagc 1260
ttaaaatttt tttgaagaac agaacttttt ttaaaaacag ttagatgcaa ccatattata 1320
taaaacagaa cagatacaag tagagctaac ttgctaaaga aaggatggag gctctgaagc 1380
tgtgacttca ttatccctta atactgctat gtcctctgta gtaccttaga tttctatggg 1440
acatcgthta aaaactattg tttatgcgag agccttgcta atttcctaaa aattgtggat 1500
acattttttc tcccattgat aattttctca ccttctatth aaaaaaaaaa aaaaagtcag 1560
tgtagtatth acatatttht cctataagg agctaacata acttttgatt tagtgthatt 1620
cataaaatta ggtagcagt ttattaacct tttgtattht ctctggcaat gtttaatatc 1680
tcataagcta tacacacctc gaagccatca atgacaacct tttcttgctg aatagaacag 1740
tgattgatgt catgaagaca atthtatctc cthttgcctt ccataattht taccaggtht 1800
tataatagta taactctgcc aaggagcggg ttatctcatc ttcactctgt aattccagtg 1860
tttgtcacgt ggttgthtga taaatgaata aagaatgaga aaaccagaag ctctgataca 1920
taatcataat gataattatt tcaatgcaca actacgggtg gtgctgaact agaacttata 1980
thttctgaaa ctggctctc taggatctac taatgattta aatctaaaag atgaagthtag 2040
taaagcatca gaaaaaaaaa tgggtattcc tacaagtcag gacattctac gtgactacaa 2100
tataatctca cagaaattth acattaatac attctaagat ttaattctta gattcttggg 2160
aaacaaattg ctctgtgga gatgattggc atcacatggg gthtttgagct gatacaccca 2220
acacttgagc tcaactgcaac a                                     2241

```

<210> 108

<211> 437

<212> DNA

<213> Homo sapiens

<400> 108

```

gaataaatga ataaagaatg agaaaaccag aagctctgat acataatcat aatgataatt 60
atthcaatgc acaactacgg gtgggtgctga actagaatct atattthtctg aaactggctc 120
ctctaggatc tactaatgat ttaaatctaa aagatgaagt tagtaaagca tcagaaaaaa 180
aaggtaaaaca aattgctcct gtggagatga ttggcatcac atggtgttht gagctgatac 240
accaacact tgagctcact gcaacagtac cagattthtca ccgctatgcc tctthtctc 300
ctgggagtht tccagaggtc ttgcaactcg gagagcatgc tcaggthtcc ccagctctac 360
aaaatcacc agaatgccaa agacttcaac acaagggtta ataaggthtga tctcagaatt 420
gtcacctcaa aaaggcc                                     437

```

<210> 109
 <211> 2587
 <212> DNA
 <213> Homo sapiens

<400> 109
 gaggtaggct gcaaattgatt ctccattttc tttccctgag ttcagaacat aggaattaga 60
 ttgatagaca tcaacatacc cgctttattg ctgactcatg acaactaatg ggaagacatg 120
 gctcagatgt gcagccacag tgagcttctg aacatttctt ctgagactaa gctcttacac 180
 acagttgcag ttgaaagaaa gaattgcttg acatggccac aggagcaggc agcttcctgc 240
 agacatgaca gtcaacgcaa actcatgtca ctgtgggcag acacatgttt gcaaagagac 300
 tcagagccaa acaagcacac tcaatgtgct ttgccc aaat ttaccatta ggtaaattctt 360
 ccctctctcc aagaagaaa tgagagagac atgagtcctc acatggaaac ttgaagtcag 420
 ggaaatgaag gctcaccaat tatttgtgca tgggtccaag ttttccttga aattaagtcc 480
 aggtttgtct ttgtgtgtac caattaatga caagagggtta gatagaagta tgctagatgg 540
 caaagagaaa tatgttttgt gtcttcaatt ttgctaaaaa taaccagaa catggataat 600
 tcatttatta attgattttg gtaagccaag tcctatttgg agaaaattaa tagtttttct 660
 aaaaaagaat tttctcaata tcacctggct tgataacatt tttctccttc gagttccttt 720
 ttctggagtt taacaaactt gttctttaca aatagattat attgactacc actcactgat 780
 gttatgatat tagtttctat tgcttacttt gtatttctaa ttttaggatt cacaatttag 840
 ctggagaact attttttaac ctgttgcacc taaacatgat tgagctagaa gacagtttta 900
 ccatatgcat gcattttctc tgagttatat tttaaaatct atacatttct cctaaatatg 960
 gaggaatca ctggcatcaa atgccagtct cagacggaag acctaaagcc catttctggc 1020
 ctggagctac ttggctttgt gacctatggg gaggcataag tgctctgagt ttgtgttgcc 1080
 tcttttgtaa aatgaggggt tgacttaatc agtgattttc atagcttaaa atttttttga 1140
 agaacagaac ttttttttaa aacagttaga tgcaaccata ttatataaaa cagaacagat 1200
 acaagtagag ctaacttgct aaagaaagga tggaggctct gaagctgtga cttcattatc 1260
 ctttaatact gctatgtcct ctgtagtacc ttagatttct atgggacatc gtttaaaaaac 1320
 tattgtttat gcgagagcct tgctaatttc ctaaaaattg tggatacatt tttctccca 1380
 tgtataattt tctcaccttc tatttaaaaa aaaaaaaaaa gtcagtgtag tatttacata 1440
 ttttacccta taaggagcta acataacttt tgatttagtg ttattcataa aattagggtta 1500
 gcagtttatt aaccttttgt atttgctctg gcaatgttta atatctcata agctatacac 1560
 acctcgaagc catcaatgac aaccttttct tgctgaatag aacagtgatt gatgtcatga 1620
 agacaatttt atctcctttt gccttccata atttgtacca gggtatataa tagtataaca 1680
 ctgccaaagg gcggtattat tcatcttcat cctgtaattc cagtgtttgt cacgtggttg 1740
 ttgaataaat gaataaagaa tgagaaaacc agaagctctg atacataatc ataatagataa 1800
 ttatttcaat gcacaactac ggggtggtgt gaactagaat ctatattttc tgaaactggc 1860
 tcctctagga tctactaatg atttaaatct aaaagatgaa gttagtaaag catcagaaaa 1920
 aaaaggtaaa caaattgctc ctgtggagat gattgggcat cacatgggtg tttgagctga 1980
 tacaccaaac acttgagctc actggcaaca gtaccagatt ttcaccgcta tgcctccttt 2040
 cactctggga gtcttccaga ggtcttgca cgggagagc atgctcagggt tccccagct 2100
 ctacaaaatc acccagaatg ccaaagactt caacacaagg gtaaataagg ttgatctcag 2160
 aattgtcacc tcaaaaaggc cctgccttcc actgttcagt tctgggtcatc tgcctatgag 2220
 atatctgaag cttgaaagag aacacttgaa aatcactgag accgtgactc ccatcccagc 2280
 acacacagca agccaagtag gttacagaga tttcttcttg ggtgatgagt tcacgccaca 2340
 tggggtatgt tctccagttc cagtgtgttg actccttctt gcttcccccc atcagccctt 2400
 gaggtcaatg tgggcagcag ccccatgggt ccaagttcta gatccgctgt ggaagacttt 2460

tttaggcaat cacacagccc tgcattggagt cctgatgaga gcttgcctaa ttgttgctag 2520
 gtttgtcatt ttaaatacag tgtttcttta gctagtgagt aaaattggct atataggaaa 2580
 aaaaaaa 2587

<210> 110
 <211> 448
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (409)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (431)
 <223> a, c, g or t

<400> 110
 agactacctg gtatggccta agggccccaa gtaaattaaa acattcatat caggcaggat 60
 agtccaagga cttagagggt atcttgaatc tggacacagg acaaacattt ctttggaatg 120
 tgaaaagtgt acacaatcaa gacttgctat gttgatcctt tactgcggta ttgttttttg 180
 ttttctgacc caaaagtgat gtgcattgct tacctatcat ggccttggtt aagggtgtcag 240
 tcttgccctc aaatttcctc ctaaagcatg gaattggcca taaatttgct tagtgatttt 300
 ctgatttagt atcattagtt tgatgactag ttttattatg tgagtgtgat aaaagggttac 360
 gcttagtata caaagacctt cttataagtc tagttaataa aactagggnc atgtgttact 420
 acaacatagg ngtttaacttt gtctggag 448

<210> 111
 <211> 798
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (770)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (773)
 <223> a, c, g or t

<220>
 <221> unsure

<222> (779)

<223> a, c, g or t

<400> 111

```

agactacctg gtatggccta aggcccccaa gtaaattaaa acattcatat caggcaggat 60
agtccaagga cttagagggtt atcttgaatc tggacacagg acaaacattt ctttgggaatg 120
tgaaaagttt acacaatcaa gacttgctat gttgatcctt tactgcggtta ttgtttttttg 180
ttttctgacc caaaagtgat gtgcattgct tacctatcat ggccttgggtt aagggtgtcag 240
tcttgccctcc aaatttcctc cttaaagcatg gaattggcca taaatttgct tagtgattttt 300
ctgatttagt atcattagtt tgatgactag ttttattatg tgagtgtgat aaaagggttac 360
gcttagtata caaagacctt cttataagtc tagttaataa aactagggcc atgtgttact 420
acaacatagg agttaacttt gtctggaggc tttttcaagc ccaagagggtt gtcattttctt 480
tatgtgtaag atactgccca catactatac tgaagtcagg aaccaagaac cgggtcaattt 540
acctcagcca agttgcttgg actgctttgc ttaataatgg gtttgccata tctactttaa 600
tgagatgtgt ggcattggtga tgggttcaaaa agtgatttgt taattattgc ctggtaggaa 660
ggagaacatg ttttttttga acctatgcaa atagccacat gtctgtgaaa agtaaaaggga 720
tactttttgtg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaattn ctnggtcgnc 780
aaggcaattc gtggtcgt                                     798

```

<210> 112

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (676)

<223> a, c, g or t

<400> 112

```

gggaaactgg gttccggagg gtcagagctg cctctgcttc aggcttcttc atgatctgga 60
tcaagcttgt ttgacttcca tctacagaag tcaaccttgg cttctcaaag agcaaaatag 120
ggctgagcag actagccctg gggaagggtca ctgtgtccta aggctggggg aaccaaggga 180
agaggttggt gttatctgga tttggaagct ggaagaaggg accctacagg gctgagactc 240
aggcttctga ggagggggaa ctgcccagct aaaactggtg cttttgccag ggtacaatga 300
ggctaattct gggaacatag aaagaagctg acctggaacc agctacagcc accagtgtcc 360
aatacacagt tagcagggtca tcttagagag aaagactcaa aagattgtct gtgaataccc 420
taaatccaat ccagggtatac tggatgcaaa cactaggaga aaaaagaaaag cttttatata 480
aggaattaaa ttgccctctg tctgaagaaa gaaacgatta ggaaagatgg aagtgatctg 540
aataaaattt acaaaaggag aatcagacag accaacctgg gtgatgtgtt tcaagctctg 600
ccccaggagc ttgaatgtct gttccttgtg gcaggagcat tcctagagac tgggtgcctca 660
ggttttatgt tgggtgncctc ctg                                     683

```

<210> 113

<211> 735

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (698)

<223> a, c, g or t

<220>

<221> unsure

<222> (700)

<223> a, c, g or t

<220>

<221> unsure

<222> (704)

<223> a, c, g or t

<220>

<221> unsure

<222> (709)

<223> a, c, g or t

<220>

<221> unsure

<222> (714)

<223> a, c, g or t

<220>

<221> unsure

<222> (730)

<223> a, c, g or t

<400> 113

```

gggaaactgg gttccggagg gtcagagctg cctctgcttc aggcttcttc atgatctgga 60
tcaagcttgt ttgacttcca tctacagaag tcaaccttgg cttctcaaag agcaaaatag 120
ggctgagcag actagccctg gggaaggtea ctgtgtccta aggctggggg aaccaaggga 180
agaggttggt gttatctgga tttggaagct ggaagaaggg accctacagg gctgagactc 240
aggcttctga ggagggggaa ctgcccagct aaaactggtg cctttgccag ggtacaatga 300
ggctaattct gggaacatag aaagaagctg acctggaacc agctacagcc accagtgtcc 360
aatacacagt tagcaggtea tcttagagag aaagactcaa aagattgtct gtgaataccc 420
taaateccaa ccaggtatac tggatgcaaa cactaggaga aaaaagaaag cttttatata 480
aggaattaaa ttgccctctg tctgaagaaa gaaacgatta ggaaagatgg aagtgatctg 540
aataaaatth acaaaaggag aattcagaca gaccaacctg ggtgatgtgt ttcaagctct 600
gccccaggag cttgaatgtc tgttccttgt ggcaggagca ttcctagaga ctgggtgcctc 660
aggttttatg ttgttgtctc tctgctccag ctcaccntn aaanctctnc cctnggatgt 720
tggaactcan attct 735

```

```
<210> 114
<211> 601
<212> DNA
<213> Homo sapiens
```

<400> 114						
attttgagga	atttacttgg	atcttttcaag	atcctgctgt	agctaagcaa	gatcttcaag	60
aaaacccttg	tcttgcttgc	attgtgtaaa	tgcaatttgc	cttgtcaaat	gactaggagg	120
ccagtatagc	aagggtccctt	tgggaaactg	ggttccggag	ggtcagagct	gcctctgctt	180
caggcttctt	catgatctgg	atcaagcttg	tttgacttcc	atctacagaa	gtcaaccttg	240
gcttctcaaa	gagcaaaata	gggctgagca	gactagccct	ggggaagggtc	actgtgtcct	300
aaggctgggg	gaaccaaggg	aagaggttgg	tgttatctgg	atttgagggc	tggaagaagg	360
gaccctgcag	ggctgagact	caggcttctg	aggaggggga	actgccagc	tagggctgat	420
acctttgccg	gggtgcaatg	aggctaattc	tgggaatata	gaaggaagct	gacctggaac	480
cagctacagc	caccagtgtc	caatacacag	ttagcaggtc	atcttagaga	gaaagactca	540
aaagattgtc	tgtgaatacc	ctaaatccaa	tccaggtata	ctggatgcaa	acactaggag	600
t						601

```
<210> 115
<211> 334
<212> DNA
<213> Homo sapiens
```

<400> 115						
gtttgaaggg	gctcaactca	tgccaatata	cccttgcct	tgcagagtgg	gacgcaagaa	60
cctgatgtta	gcaaactctc	cacacttta	ttcaaccctg	caaacacttt	ccaagtgcct	120
tctgtttgtc	aggcaatatg	ccagtcacta	ggaatgaaga	ggtagataag	gatgggcctt	180
aaaatcaatc	tagtgaggag	ggacaacata	aacaaatgaa	caaacaatta	tcagaaatat	240
tttttatggt	gtggcaaaac	agtgaaatat	aggatcta	ttggtttgga	aagaaagaga	300
aaatttaaca	gaaaaagtaa	tgtttgaagc	cagt			334

```
<210> 116
<211> 193
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> unsure  
<222> (38) .. (90)  
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (94)
<223> a, c, g or t
```

<220>
 <221> unsure
 <222> (96) .. (97)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (99)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (156)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (172)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (179)
 <223> a, c, g or t

<400> 116
 gaatgaaaca gtgggatgca gtgaggaaga ggaaacannn nnnnnnnnnn nnnnnnnnnn 60
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn tagngnncna atgtaggggg aaagttaata 120
 aaaattgtat tatattaggc gttttttgtt aaatangtag atcatagctg cncttgtcnc 180
 aaaaaggtaa cta 193

<210> 117
 <211> 152
 <212> DNA
 <213> Homo sapiens

<400> 117
 ggcattgcct atgattctac gtatatattaag tccaaacatc aagcagtact atctatgata 60
 gtaaaactgg taggctaaac attggggagt tattacattg acaacaacat gaagggggtt 120
 atgggacttc tggtaatggt ttgtttcctg at 152

<210> 118
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 118

```

atatatTTTT gaatgaagtt caaggcatgt atTTTTatgt gttaaccaaa agatgcattc 60
aaggatgtta atctcagcag gatttgtaat acaccaaaat tggaaaaaac cctcaaaatg 120
tctatcaatg gtagaatgga atTTTataca gcaatggaaa tgcattgaact atgactatta 180
gcagcaacat gaatgatttt cataaaaaata gTTTTgagca aagaatccag atataaaaga 240
gggcatgccc tatgattcta cgtatatata gtccaaacac aagcagtact atctatgata 300
gtaaaatggg aggctaaaca ttggggaggtt attacattga caacaacatg aaggggttta 360
tgggattctg gtaatgtttt gtttcctgat ctgggcactg ggtaccagga tgtatttact 420
ttgtgaacat ttaaccatct acgatttttg gatttttctg ggtatatgtt atactttcaa 480
taaaacattt tcatgaga                                     498

```

<210> 119

<211> 663

<212> DNA

<213> Homo sapiens

<400> 119

```

atgtatttga ctatattatt tagttctgaa aggaattttt taatacagtg aaacattagt 60
taaaaaataaa tgttaactcc aaaaagaata ataaaatcat tatttttttaa tcagaggctg 120
ccagtgtttt tctgcttaat ctatacagca tcttagctgt aaaaatgata gaattcatgt 180
tattttacta tgcattctca gtaacaataa atgtgttgct cacttctaca ttttagatag 240
ctgacataag gcctaacatg gaaagcaaaa agctatccag gaaatatttc cctgctcatg 300
catatttcct ttggcataca aatcattgta aatgatgggtg agttaacttc aaacatttca 360
agctacacaa ctaatgtaat taaaccctaa gtccaattta ctattggccc ttggtacttc 420
tgcaggctga tgttaagtgt catttttcaa gtctttcatt gcctataaac aagatgggtg 480
caattttctt tattttctga acacttgcaa tttcctaaaa gtttcatact tcttcatacc 540
ttcaaataatg atttaggctt ttctagtacg taggcttccc ttttctgcct tgcttgcaga 600
ccctgttcat gcttggttaga catagcttca acgtgacatc tgggaagctt cccatgacat 660
gga                                     663

```

<210> 120

<211> 904

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (684)

<223> a, c, g or t

<220>

<221> unsure

<222> (888)

<223> a, c, g or t

<220>

<221> unsure
 <222> (893)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (896)
 <223> a, c, g or t

<400> 120
 aaaaaaaagg actttgagtc cattcaaagt taagtaggag ctctccaggt tcttccagtg 60
 acccatttac cacctctact cctcacctca catctggctt cctccagggg ccctgataca 120
 gtgggtgatg ggtcctaagg gggcctccag gaccaccag ccctatgagg aaagagttct 180
 tcctgatcct accccttgac ttctttttct ttctcctgca ggtctcagaa cggccccgaa 240
 gcctccccct gtccccctgaa ttggagagct ctcttgatg ccctctgtta gggcccaccc 300
 caatcccagg gcagaaggac atgagggagc aaagagcttg aggaatgcca tactccggct 360
 ggtccgggac atggaaattc ggactcaggg aggaccggg ctgggcaatg actgggagac 420
 ttgcctgggt tcccaggact tgggggtcct gactcccagc cctcatcctg cagtcccctc 480
 tgttcccagc ccagccttt ctaagccatt gggaatagaa tggccccctt tgttctggtg 540
 tccaggggtg atttgtccaa agctcttatt tccagtgcc aagccccaga ggcttgtaag 600
 agttgggatg agggatggag agggactggg tctctgggaa caggttggag gtcttatctg 660
 tggactgtct gactcccagc tgangccaag atggggcatg tccccgtctc tgcttagcgt 720
 ctgggtgaga aaaacaggct gtgatccaga agaagggaag atagagaagg agggaaagga 780
 tgtaggcgaa ggaggtgaga gacaggatag gaggaaggaa gtggaggagg aggtggtagg 840
 aattggaatg aggtagaagc cgtgcagagg aagaggggag aaggacgnag gangancgat 900
 gaag 904

<210> 121
 <211> 1309
 <212> DNA
 <213> Homo sapiens

<400> 121
 aaaaaaaagg actttgagtc cattcaaagt taagtaggag ctctccaggt tcttccagtg 60
 acccatttac cacctctact cctcacctca catctggctt cctccagggg ccctgataca 120
 gtgggtgatg ggtcctaagg gggcctccag gaccaccag ccctatgagg aaagagttct 180
 tcctgatcct accccttgac ttctttttct ttctcctgca ggtctcagaa cggccccgaa 240
 gcctccccct atccccctgaa ttggagagct ctcttgatg ccctctgtta gggcccaccc 300
 caatcccagg gcagaaggac atgagggagc aaagagcttg aggaatgcca tactccggct 360
 ggtccgggac atggaaattc ggactcaggg aggaccggg ctgggcaatg actgggagac 420
 ttgcctgggt tcccaggact tgggggtcct gactcccagc cctcatcctg cagtcccctc 480
 tgttcccagc ccagccttt ctaagccatt gggaatagaa tggccccctt tgttctggtg 540
 tccaggggtg atttgtccaa agctcttatt tccagtgcc aagccccaga ggcttgtaag 600
 agttgggatg agggatggag agggactggg tctctgggaa caggttggag gtcttatctg 660
 tggactgtct gactcccagc tgaggccaag atggggcatg tccccgtctc tgcttagcgt 720
 ctgggtgaga aaaacaggct gtgatccaga agaagggaag atagagaagg agggaaagga 780
 tgtaggcgaa ggaggtgaga gacaggatag gaggaaggaa gtggaggagg aggtggtagg 840

```

aattggaagg aggtagaagc cgtgcagagg aagaggggag agggacgaag gaggagcgat 900
gaagaagagg agggagacaa aaagaggggat ggaggagaga gggagtctgg agaacaaagg 960
gtcctttctc tggggagggg tgcagtgggc ggggctgaca ctgtcagcca atcctcccat 1020
cggggaagag aatcctggac agggacagga tggggagggg atttataacg ggcttttttg 1080
tgggagatgg gtacccagtg ggggccactg gagggctctc gggcacactc tggcccttcc 1140
cagaaagggg gtccgtcttc tcgaatcctt ccacagttgt gtattgcaaa ctacggcgca 1200
ttttactatt gatcacacgt cattatcttg tcattacata ctatttctat tcaacctccc 1260
ccaactgaag tgtggccgcc acaatcacca ccaaccccca cacaaccaa 1309

```

<210> 122
 <211> 295
 <212> DNA
 <213> Homo sapiens

```

<400> 122
gcagtttggg aattagaaaa aaacccaaag tatgcatgca gttctgtaag ataaagtgtc 60
tgtccaggca tgcatacaac ccagcaattg catgcctggg cgcttacctt acagaaatga 120
acatttataa ttacattata atatgtacac caaattcatc acagctttat taatagaagc 180
caaactctct gtgggcttct cacagtgtac ccattgccag agtaaactgc agccttgaac 240
cattgctcag cctccttacc catgagctat gaacactgaa gcaggttgca cagtg 295

```

<210> 123
 <211> 714
 <212> DNA
 <213> Homo sapiens

```

<400> 123
caaaagaccc tgtcaacagg attaaatata cagccaccga ctcgagaaaa atatttttgca 60
aaacagcgta tccggcaaaag aattaatatc agaatacata atgaattctc gaaaactcga 120
agtataacaa atatcgtaac ctggaaaagt ggcaaaacca ttaataaaca tttcaccaca 180
taggatatat agatggccaa agaagcatat gaaaaagatg cgcaacatca ttagctatta 240
gggaaatgca aattaaaacc accattagga tattagtaca gaatggttaa acatcaaaaa 300
taatagtgat aacaccaaag gccataaagg aagtggagga gaaataggat cattgatata 360
ttgttttttg gaaggtaaaa tggtagagcc ctctagaaag cagtttggtg attagaaaaa 420
aaccctaaag atgcatgcag ttctgtaaga taaagtgtct gtccaggcat gcatacaacc 480
cagcaattgc atgcctgggc gcttacctta cagaaatgaa catttataat tacattataa 540
tatgtacaca aaattcatca cagctttatt aatagaagcc aaactctctg tgggcttctc 600
acagtgtacc cattgccaga gtaaaactgca gccttgaacc attgctcagc ctccttacc 660
atgagctatg aacactgaag caggttgcac agtgaaaaaa aaaaaaagtc gacc 714

```

<210> 124
 <211> 924
 <212> DNA
 <213> Homo sapiens

<400> 124

```

agagtggcct aggacagctc ctctcctgcc agagctaggc aggcgccgaa gtagccgcat 60
ggccccgtca gaagacccca gggactggag agccaacctc aaaggcacca tccgtgagac 120
aggcctggag accagctccg gtgggaagct ggctggccat cagaagaccg tccccacggc 180
tcacctgact tttgttattg actgcaccca cgggaagcag ctctccctgg cagcaaccgc 240
atcaccaccc caagccccc gtcccaatcg agggcttgtc accccaccaa tgaagaccta 300
catcgtgttc tgtggggaaa actggcccca tctgactcgg gtgaccccca tgggtggggg 360
atgccttgcc caggccaggg ccaccctgcc gctctgcaga gggctctgtg cctcagcttc 420
cttcccagtc agcccgtctt gccccagga gggtcccag gctaagggga aaccctgtaa 480
ggctgcgcct gtgaggtctt caacttgggg aacagtcaag gactcactga aagccctctc 540
ctcttggtgc tgtgggcagg ccgattagct ggaaggaccg ggctctgatg cccagaggct 600
gcaattccca gggcctggcc ctgcttcccc agctaagcag gagtcttttg tgcttgagcc 660
aaggaaacat cattagatcc gctaaggggc atctgaacaa tccgtcgagt ggcagaggca 720
ggataagtca cctgcacatg aagagactca ttcattcata cagcaaatat tactggtaca 780
tcttccacat gccaggccct gcaaagtgct ggggagatac catgggtttac atggagctgg 840
tatttttggg gtggagggaa cccaccctga ataaataaag taaccaata aataaagaag 900
atgattttga acagcgaaaa aaaa                                     924

```

<210> 125

<211> 939

<212> DNA

<213> Homo sapiens

<400> 125

```

agagtggcct aggacagctc ctctcctgcc agagctaggc aggcgccgaa gtagccgcat 60
ggccccgtca gaagacccca gggactggag agccaacctc aaaggcacca tccgtgagac 120
aggcctggag accagctccg gtgggaagct ggctggccat cagaagaccg tccccacggc 180
tcacctgact tttgttattg actgcaccca cgggaagcag ctctccctgg cagcaaccgc 240
atcaccaccc caagccccc gtcccaatcg agggcttgtc accccaccaa tgaagaccta 300
catcgtgttc tgtggggaaa actggcccca tctgactcgg gtgaccccca tgggtggggg 360
atgccttgcc caggccaggg ccaccctgcc gctctgcaga gggctctgtg cctcagcttc 420
cttcccagtc agcccgtctt gccccagga gggtcccag gctaagggga aaccctgtaa 480
ggctgcgcct gtgaggtctt caacttgggg aacagtcaag gactcactga aagccctctc 540
ctcttggtgc tgtgggcagg ccgattagct ggaagggccg ggctctgatg cccagaggct 600
gcaattccca gggcctggcc ctgcttcccc agctaagcag gagtcttttg tgcttgagcc 660
aaggaaacat cattagatcc gctaaggggc atctgaaaca tccgtcgagt ggcagaggca 720
ggataagtca cctgcacatg aagagactca ttcattcata cagcaaatat tactggtaca 780
tcttccacat gccaggccct gcaaagtgct ggggagatac catgggtttc ctggagctgg 840
tatttttggg gtggagggaa cccaccctga ataaataaag taaccaata aataaagaag 900
atgattttga acagcgaaaa aaaaattcga gctcgttg 939

```

<210> 126

<211> 317

<212> DNA

<213> Homo sapiens

<400> 126

```

aaaaagggttt gaatatttaa aatcagttcc atgttagtca aagagttaca attatagttc 60
aactaaacct gcagtcaatg taagtattca taccctaaga aaaagcacca caaatgatg 120
tctgtgattg ttaacggttg attggtttcc tgtgtccata gtggacaata ttatgaagca 180
tagacagaaa aacatgttta ctaagaagct tttttttcct tccaggaaat tctgtagggtg 240
aaacatgttg aacattgtca gttgacacat attctggtga agtctaacat taaacattaa 300
actaaaaagc aagtgc 317

```

<210> 127

<211> 144

<212> DNA

<213> Homo sapiens

<400> 127

```

gaaaccaaatt attttcctaa tgcaaaagtt gaaaccttat ctgaatggaa gttcgtagtg 60
taattcccca agttttaaat gcctgggctt cgттаатgag tttttacca ttgtctgcta 120
catgtgtaaa atttcacctc agca 144

```

<210> 128

<211> 161

<212> DNA

<213> Homo sapiens

<400> 128

```

aaccaaatat tttcctaatt caaaagttga aaccttatct gaatggaagt tcgtagtgta 60
attccccaag ttttaaattgc ctgggcttcg ttaatgagtt tttaccaatt gtctgtctaca 120
tgtgtaaaat ttcacctcag cattttgtgg ttttgttttt t 161

```

<210> 129

<211> 728

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (239)

<223> a, c, g or t

<220>

<221> unsure

<222> (255)

<223> a, c, g or t

<400> 129

```

gcagagttag agccaatttc atttgtctcg cactgagaat gtgcattccc agcagatcat 60

```

```

ggttgagctc agcacacctg caactcagcc agcctctttg aagggtgcac agttactaac 120
tgtcagcggt gcacagccac ctttagcagg tatgttcaga acttacattc ccaccctttc 180
taaaacagct cacagtaaca agagaacggg atttaacttt tgacatgcac actcatgana 240
accaatgatt tttgnaagcc aaattgttga gaagataagg tggggattct gactactagt 300
atTTTTTACAA atctgattgt cgttgcaggt tttgttttat tttgttgtgt taatgctgag 360
agtggagaat agattggaat atttgcctct tgtgtttctt tttgctttgt aacattgcaa 420
gtggtccaca ttttccttta tttaaaattt aaagttggtg cctgggggtt ctggtgttaa 480
atagaagtga tacttctgca taaagtatta tggagatgct ctgttccatc cagggaggtg 540
caggtgaaaa gagggcagtt catcctcctc acacttaggg cagggagcag catgcagggg 600
cagatcagca gctttgcatg ttgacaaatc cactctctgc tgcagatgcc taggggaagt 660
tgcagactta aattttcttt tgtaaaatgg ggaacacaa acagatctta tgtcactggt 720
tactccag 728

```

```

<210> 130
<211> 680
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (375)..(563)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (615)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (649)
<223> a, c, g or t

```

```

<400> 130
ttccgaccta cattataaga ctgctgtaat gatctaaaac tttagctggt ttaatatagt 60
tttaaaacta atgatattct tctctgtcag taaaatacaa actttttctt aataaaaatg 120
taatggaaaa ctgttcctca tagatttttg tcactttaca aagtgacaaa atcattttgt 180
tagtttatgg aaaataagct tgtaaaactt tttacctaaa agataggact gaaatttcag 240
cttttttaat ttgatgatga gtttttaatt tcttttgaaa aagaatgtat gcttctaata 300
atTTATCAAG aggaagaata ccaaaagaaa atatctgctc ttctttcttt ttacttagat 360
ttttttgcat ttttnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnactgttt ttcctctgct ctcatacaac aatcaacaca 600
gaaggcttct gtggnctcaa atgtggggga attttttcca cgccaagcna gcagtcaggg 660
ctgcagtgtc tccaacttag 680

```

<210> 131
 <211> 858
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (375)..(563)
 <223> a, c, g or t

<400> 131
 ttccgaccta cattataaga ctgctgtaat gatctaaaac tttagctggt ttaatatagt 60
 tttaaaacta atgatatctt tctctgtcag taaaatacaa actttttctt aataaaaaatg 120
 taatggaaaa ctgttctctca tagatttttg tcactttaca aagtgacaaa atcattttgt 180
 tagtttatgg aaaataagct tgtaaaactt tttacctaaa agataggact gaaatttcag 240
 cttttttaat ttgatgatga gtttttaatt tcttttgaaa aagaatgtat gcttctaata 300
 atttatcaag aggaagaata ccaaaagaaa atatctgctc ttctttcttt ttacttagat 360
 ttttttgcac ttttnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
 nnnnnnnnnn nnnnnnnnnn nnnactgttt ttctctgtct ctcatacaac aatcaacaca 600
 gaagacttct gtgaccaagt ggagtccttt tatgacacat tccatactgt ggctgacatg 660
 atgtatttct gccagatgct ggcagttgtg gaaactatca atgcagcaat tggagtcact 720
 acgtcaccgg tgctgccttc tctgatccag gtctcacatc caggtcacgc tgatgcaaaa 780
 gggtttataca taaattttcg tcacctttat aaacagcgca gacggcgcta tggacaaaaa 840
 aagaaaaaga tccactaa 858

<210> 132
 <211> 328
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (107)..(240)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (254)..(255)
 <223> a, c, g or t

<400> 132
 aatttgatg aactatTTTT taagatatta actcttttct cctatatattt tgttttcatt 60
 taaacattgt tgtgacatat tgaaatgttt atctttactt ttcattnnnn nnnnnnnnnn 120
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180

```

nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 240
tgctttttttc cttnttggtt tcttctattc cttttgagat cagtttcctt ctgttaaggg 300
ctgaaatgtg gtccccctca aaaactcc 328

```

```

<210> 133
<211> 762
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (593)..(706)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (748)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (751)
<223> a, c, g or t

```

```

<400> 133
cctacacact ggtaatgcaa cagaatgccc aagagtgacc tcataaagca aggattccct 60
tcgtggcccc ttctctgctg cctctcagaa tccagacgct aaggaaaatc cctaagcaga 120
gatttttctgt tggatgctaa aagcaaggaa taaaagttga aaatttggaa aatgtctcaa 180
caccgtcacc agcgccactc gagagtcatt tctagttcac cagttgacac tacatcgggtg 240
ggatttttgcc caacattcaa gaaatttaag taaatattat ctatctccat tgcctgttaa 300
gaaatgtgct agtagaagtg tgagggcagg gtgtcagtggt tctctcagcc tcttccctca 360
gatactcgtc tgcttaccaa aataagttgc atgtccttga caatctgggt tctatgattg 420
gtgaggctgg catgctatta cctttatgtg ccctgtagac ttgaatgacc agtttgacca 480
gtttgactgt tagataatct gaaggctttt ctcttttttt ataatagacc ccatctcaaa 540
tcagataatg aaaattacat atcttgatat attagaaaag tatatacatt ctnnnnnnnnn 600
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 660
nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnngaga gtacacagat 720
tggcccggag tgatggtgtg cgctgtngt nccggtgct cg 762

```

```

<210> 134
<211> 11677
<212> DNA
<213> Homo sapiens

```

```

<400> 134
cagccctcgg cagacggcca atggcggcgg tgctcggggc gctcggggcg acgcggcgct 60

```

```

tggtggcggc gctgcgaggc cagagcctag ggctagcggc catgtcatca ggtactcaca 120
ggttgattgc agaggagagg aaccaagcta tacttgacct taaagcagca ggatggtcgg 180
aattaagtga gagagatgcc atctacaaag aattctcctt ccacaatttt aatcaggcat 240
ttggctttat gtcccagatt gccctacaag cagagaagat gaatcatcac ccagaatggg 300
tcaatgtata caacaaggct cagataactc tcacctcaca tgactgtggg gaactgacca 360
aaaaagatgt gaagctggcc aagtttattg aaaaagcagc tgcttctgtg tgatttcttc 420
caaaatacat aagtctgaga ggctaaactt gatggctgtg ttaacatatg tcacgtgtag 480
cacagtggag aaagcaggat atggctcata atgacagtgg tgaagacctg cgaatgaagt 540
tgctagttaa cacctacatt agggtttgac ataggctctat gttatgggtc gctgcatctg 600
ctggaactca cagactttac tatagagaat caaagatccc gtatccgaag tctatggaaa 660
tgctcatggg ggtaaattcc aacagaatga aacaccaaac ttgcttaaag taactcacgt 720
ttcaatttga aagagatatt gtcaaaattg gaggccccc ggttcctgtc tgttccaaat 780
ctttgcatga tgacagtggg ttctctgatg tggtaagctt tggctttctt ctgttttctt 840
tctaaaagat cactggagta gagaggagtt aaacagacat gacctttgac ctcttgcatg 900
acctccacag atagcaaacc gggccgacac atgggtgacg atgtcctttt ctacaatgaa 960
gttaatgaaa gttctgaaaa tagtgattac tttctgacat tgataggatt taggaaacct 1020
ctggataaat agcttaagca tggctgttta tgtttttgc atagacaaaa agcagcagca 1080
tgtacattgt atttggacac aagcctgcct cggttaatat attgaactat tggaccacta 1140
gggttagtag ggagcggctt gtacactttc tgattcagca ttcagaaaca ttctagggtg 1200
actctgtagc tttcagtttt gtaaagttat cggaaaaaca tcgggagggg ttggccatca 1260
tatgtgagct ttgtgtttca atgccagtta ctcaggatta gtaaattaat gactgtccag 1320
aggacttcag ggtcaccaag ctgctgcacc tgccattggc tgactctccc cggctatctg 1380
tggctgagat ggtgctgctt aggtcacgca gagcatgagc tgctgctgaa agggcacagg 1440
agatggccct tgggcttctc atcccaggat gcctgccttg cccaccaatc catgagaaga 1500
tatgtatgat ttcagtaggc cctggatcag cttgtcacct ctggtttctt gtttgctttc 1560
cactcactca gctggagttt catttccaga ctaaagtctt catcattggc ttcagaaaca 1620
gcattcatct gtggctgtgc tgatgtagta caccaagaac aactgggctc ttctctgtca 1680
ctttcagtg gctaccttcc ctcacctctc caagcagcat gaaagaattc tttacatttt 1740
taatctcttt tttgtttttc cctgaaagta tgctttgggt cttaaagaga gaagtcacaa 1800
aagtatacta ctgagtttcc tggagatgaa atcctgttgt ccctagctat gtgaatgagc 1860
acagggatcc ctgatgccat tattttgtat attcatcagg cacacactta ctgagggcct 1920
tctgtgtgcc ctaggggatt gagcacagtg acatatcagg gcaggtagaa acagatggag 1980
agctgatgcy ggctgtctta gagcagctgc cccaggaggc ccctgtggat ggatgttggg 2040
caggagccct gagacgttag gggcatataa ctaaaggaca tagcaggagt tataggagga 2100
gctgatccct gagggaaaca atgaagacgg agaagatggg gctaaagttt gaattgtggg 2160
gacattaatc acggtgatcc ttaaaacttt gctgttgatg attttaaag gagaaaaatga 2220
gtacgtaaga tgttatttcc cagttcagta tataggttgc ccacaaagta ttttcctacc 2280
atgaatgggc atatatactt gttgtagaat accagggaca gcagagatgg tggggtagtt 2340
acttcctttt cttacagccc aagaactttg gtgtccagga gattgaccaa tttagccact 2400
gagcatttaa tacaacacag ggctaccag atcccactgt cctgatttgc cctgaaagcc 2460
aaaggagtca ggagaagggt agtgggggtg atatattaat cctgagagtt gaacagagca 2520
aaaatcccta ttacttttgt acttaaaaca tctctgccac atgtgctcac tcttttatatt 2580
ctgttttaggt ggtttatatg tgcacatccc atcctatgcc tgcagttagc caactcaggg 2640
tttatattgc ctcctttctt tttttctttt tttttttttt ttttaagaga tggggctctc 2700
ttctgtcatg cagactggag tgcagtgggt tgatcacagc tcattgtaac ctccaacgcc 2760
tggactgaag tgatcctcct gccttggcct ctctggtagc tgggactaca ggtgcatgcc 2820
accacacca cctaattttt tttattttta tttttgtag agacagtctc actatcttgc 2880
tcgggctggg cctgaactcc tgggctcaag ttatcttgc gcctcagcct cccatgggta 2940

```



```

atctttatatt cctttttttt ttttttttgg agatggagtt tcgctcttgt cgcccaggct 3000
ggagtgcgaat ggcacgatct tggctcactg cagtctccac ctcttgggtt caagtgatcc 3060
tccatcctca gcctcctgag tagctgagat tacaggcaac tgccaccatg cgcggttaat 3120
ttatgtatatt ttttttagta agagatgggg tttcaccatg ttggccagac tggctctaaa 3180
ctcctgacct caagcgacct gcctgccttg gcctcccaaa gtgctgggat tacaggcatg 3240
agccgctatg cctcgctcgt gattttttatt tcttattttt ttttttagaga tgggggtctc 3300
actatgttgc tcaggctgat ctcaaaactcc tggcctcaag tgatcctccc accttagcct 3360
cccaagttgc tgggattata agtgtgagcc actatcccta cctcactatt accttctttg 3420
cttctcttgt tttcttttgt tctaagtcaa acccatcaca atcttttctt gtccttccag 3480
gtgttttcca gtgctgtgcc ctggatgtgc tctctttctc ttagagccca gagaacttgc 3540
ttttccccct tatatatgac ccttaacttt ttctaacaca ttattaaggg cctgtgtcta 3600
tcagctgggg gcacttcttg aaggaggggc ctttgtgtgg tctgtttcta gtgacttcca 3660
gctttaaccc agagcctcat gattgctggg tgcccatagc ctttttgctg aatggaggca 3720
ctcagctctc ttgggaagag agaatccatg atagaccac ttgggagctc ccacttcag 3780
gggcctacac actggtaatg caacagaatg cccaagagt acctcataaa gcaaggatcc 3840
ccttcgtggc cccttctctg ctgcctctca gaatccagac gctaaggaaa atccctaagc 3900
agagattttc tgttgatgc taaaagcaag gaataaaagt tgaaaatttg gaaaatgtct 3960
caacaccgtc accagcgcca ctcgagagtc atttctagtt caccagttga cactacatcg 4020
gtgggatttt gcccaacatt caagaaattt aagtaaatat tatctatctc cattgcctgt 4080
taagaaatgt gctagtagaa gtgtgagggc aggggtgtcag tgttctctca gcctcttccc 4140
tcagatactc gtctgcttac caaaataagt tgcagtctct tgacaatctg gtttctatga 4200
ttggtgaggc tggcatgcta ttacctttat gtgccctgta gacttgaatg accagtttga 4260
ccagtttgac tgtagataa tctgaaggct tttctctttt ttataatag acccatctc 4320
aaatcagata atgaaaatta catatcttga tatattagaa aagtatatac attctggctg 4380
ggcgcggtgg ctcacgcctg taatcccagc actttgggag gctgagggcc ttagcagcgg 4440
ctgccgcagc tcaatcgcg agcaactagc cgggcgtctg cgggagccga gcgtgggacc 4500
tgtgggccta ccacctggtg ccctcatgga gacaagaagc cctgggttga acaacatgaa 4560
gccccagtca ctgcagctgg tactggaaga gcagggtgctg gcactacagc agcagatggc 4620
agagaatcag gcagcctcct ggcggaagct gaagaactcc caggaggccc agcagagaca 4680
agcaaccctt gtgaggaagc tgcaggccaa ggtgctgcag taccgaagct ggtgccaaaga 4740
gctggagaag cggctagaag ccactggagg accaatcccc cagagggtggg aaaatgtgga 4800
ggagccaaac ctggatgagc tgctggtccg attggaggag gagcaacaga ggtgtgagag 4860
tctagcacag gtgaacaccc agcttcgact gcacatggaa aaagctgacg tgggtgaataa 4920
agcccttagg gaagatgtgg aaaaactgac agtggactgg agccgggccc gggatgagct 4980
aatgaggaag gagagccagt ggcagatgga gcaggagtgg agtctgctgt tttccttgct 5040
tgtactcaga gatctgatgg agctaaaagc tgagcatgtg aggccttcag ggtctctgtt 5100
gacctgttgt ctgcgcttga ctgtgggagc acagtctcgg gaaccaacg gatctggaag 5160
aatgaatggg cgggagccgg cccagctgct gctgctacta gccaagacc aggagctgga 5220
gaaggaagcc catgaaagga gccaggagt aatacagctg aagagtcaag gggatctgga 5280
gaaggctgaa cttcaggacc ggggtgaccg gctctctgct ctgttgacc agtctcagaa 5340
gcaaaatgaa gattatgaaa agatgataaa ggctctgaga gagacagtgg agatcctgga 5400
gacaaatcac acagaattaa tggaacatga agcatctctt agtaggaatg cgcaagagga 5460
gaagtgtgtt ttacagcagg tgatcaagga tataaccag gtcattggtg aagaagggga 5520
caatatagcc caaggctctg gtcattgaga ctctttggaa ttggactcta gtatcttctc 5580
ccagtttgat taccaggatg cagacaaggc tcttactctg gtgcgttcag tgctgactcg 5640
gagacgccag gctgtgcagg acctaaaggc gcagcttgca ggctgtcaag aggctgtgaa 5700
cttgttgcaa cagcagcatg atcagtggga ggaagagggc aaagccttga gacagcggct 5760
gcagaagctc actggggagc gggacactct ggcagggcag actgtggacc tccagggaga 5820

```

ggtgactct	ctcagcaagg	agcgagagct	gctgcagaag	gccaggggaag	agctgcggca	5880
gcagctggag	gtgctagagc	aggaggcatg	gcgcctgcga	agggtaaagt	tggagcttca	5940
gctgcagggg	gactctgccc	agggccagaa	ggaggaacag	caggaggagc	tgcacctggc	6000
tgtccgggag	agggagcgtc	ttcaggagat	gctgatgggc	ctggaagcca	aacagtcaga	6060
atcactcagt	gaactgatca	ctcttcggga	agccctggag	tcaagtcacc	tggaagggga	6120
gttactgagg	caagagcaaa	cggaagtgac	cgcagcgctg	gctagggcag	agcagtcaat	6180
tgcagagctg	tcgagttctg	aaaacaccct	gaagacagaa	gtagctgac	ttcgggctgc	6240
agctgtcaag	ctcagtgcct	taaagtaggc	tttggcgtta	gataaagttg	ggctgaacca	6300
gcagcttctc	cagtttagagg	aggagaacca	gtctgtgtgc	agcagaatgg	agggcgcaga	6360
gcaggcgaga	aatgctttgc	aggtcgacct	ggcggaggca	gagaagagga	gggaagccct	6420
gtgggaaaag	aacactcacc	tggaggctca	gctgcagaaa	gctgaggagg	ctggggctga	6480
gctgcaggca	gatctcaggg	acatccaaga	agagaaggaa	gaaattcaaa	agaaactaag	6540
tgagtcacgt	caccagcagg	aggcagccac	gactcagctg	gagcagctac	atcaggaggc	6600
aaagcgacag	gaagaagtgc	ttgccagggc	agtccaggag	aaggaggccc	tagtacgaga	6660
gaaagcggct	ctagagggtgc	ggctgcaggc	cgtggagcgt	gaccggcagg	acctcgctga	6720
acaactacag	gggctcagct	cagccaagga	gctactggag	agcagttctgt	ttgaagccca	6780
acaacaaaat	tctgtgatag	aggtcaccaa	ggggcagctg	gaggtccaga	ttcaaactgt	6840
cactcaagcc	aaggaagtaa	tccaagggga	agtgaagggtc	ctgaagctgg	aactggacac	6900
tgaacggagt	caggcagagc	aggagcggga	tgtctgcagcc	agacagctgg	cccaggctga	6960
gcaagaaggg	aagactgcct	tggagcagca	gaaggcagcc	catgagaaag	aggtgaacca	7020
gctccgggag	aaatgggaga	aggagcgctc	ctggcaccag	caggagctgg	caaaggctct	7080
ggagagctta	gaaagggaaa	aaatggagct	ggaaatgagg	ctaaaggagc	agcagacaga	7140
aatggaggcc	atccaggccc	agaggggaaga	agaacggacc	caggcagaga	gtgccctatg	7200
ccagatgcag	ctggaaacag	agaaggagag	agtatccctc	ctggagacac	tgtctgcagac	7260
gcagaaggag	ctagcagatg	ccagccaaca	actggaacga	ctgaggcagg	acatgaaagt	7320
ccagaaatta	aaggagcagg	agaccactgg	gatactacag	accagctcc	aggaggctca	7380
acgggagctg	aaggaggcag	cccggcagca	cagagatgac	cttgctgccc	tccaagaaga	7440
gagcagctcc	ctgctgcagg	ataagatgga	cctgcagaag	caggtggagg	acttgaagtc	7500
tcagctggtg	gcccaggatg	actcccagag	gctggtggag	caggaggttc	aggagaagct	7560
gagagagacc	caggagtata	accgaattca	gaaggagctg	gagagagaga	aagccagcct	7620
gactctctca	ctgatggaaa	aggaacagag	actcettggt	ttacaagaag	ctgactctat	7680
tcgacaacaa	gagctgagtg	ccctgcgcc	ggacatgcag	gaggcccagg	gagaacagaa	7740
agagctcagt	gctcagatgg	aattactaag	gcaagagggtg	aaggaaaagg	aggctgactt	7800
tctggcccag	gaagcacagc	tgtctggagga	gctggaggcg	tctcatatca	cggagcagca	7860
gctgcgagcc	tccttgtggg	cccaggaagc	caaggcagcc	caactacagc	tgcgactgcg	7920
cagcacagag	agccagctag	aagcgctggc	cgcagagcag	cagcccggga	accaggccca	7980
ggcccaggcc	cagctggcca	gcctctactc	tgccttgca	caggccctgg	ggtctgtttg	8040
tgagagcagg	cctgagctga	gtggtggggg	agactctgct	ccttccgtct	ggggccttga	8100
gccagaccag	aatggagcta	ggagcctctt	taagagaggg	cccctgctga	ctgctctctc	8160
cgctgaggca	gtagcatctg	ccctccacaa	gcttcatcaa	gacctgtgga	agactcaaca	8220
gaccggggat	gttctgaggg	atcaggtcca	gaaactggaa	gagcgtctaa	ctgatactga	8280
ggctgagaag	agccaggtcc	acacagagtt	gcaggatctg	cagagacagc	tctcccagaa	8340
tcaggaagag	aaatctaagt	gggaaggaaa	gcagaactcc	ctagaatctg	agctgatgga	8400
actacatgaa	actatggcat	ccttacagag	tcgcctgcgg	agagcagagc	tacagcgaat	8460
ggaagcccag	ggtgagcgag	agttacttca	ggcagccaag	gagaacctga	cagcccaggt	8520
ggaacacctg	caagcagctg	tcgtagaagc	cagggtcag	gcaagtgctg	ctggcatcct	8580
ggaagaagac	ctgagaacgg	ctcgctcagc	actgaagctg	aaaaatgagg	aagtagagag	8640
tgagcgtgag	agagcccagg	ctctgcaaga	gcaggggcga	ctgaagggtg	cccaagggaa	8700

```

ggctctgcaa gagaatttgg ccctcctgac ccagacccta gctgaaagag aagaggaggt 8760
ggagactctg cggggacaaa tccaggaact ggagaagcaa cgggaaatgc agaaggctgc 8820
tttggaattg ctgtctctgg acctgaagaa gaggaacca gaggtagatc tgcagcaaga 8880
acagattcag gagctagaga agtgtaggtc tgttttagag catctgcca tggccgtcca 8940
ggagcgagag cagaagctga ctgtgcagag ggagcagatc agagagctcg agaaggatcg 9000
ggagactcag aggaacgtct tggagcatca gcttctagaa cttgagaaga aagaccaaatt 9060
gattgagtcc cagagaggac aggttcagga cctgaaaaag cagttggtta ctctggaatg 9120
cctggccctg gaactggagg aaaaccatca caagatggag tgccagcaaa aactgatcaa 9180
ggagctggag ggccagaggg aaaccagag agtggttttg acccacctta cgctggacct 9240
agaagaaagg agccaggagc tgcaggcaca aagcagccag atccatgacc tggagagcca 9300
cagcaccgtt ctggcaagag agctgcagga gagggaccag gaggtgaagt ctcagcgaga 9360
acagatcgag gagctgcaga ggcagaaaga gcatctgact caggatctcg agaggagaga 9420
ccaggagctg atgctgcaga aggagaggat tcaggttctc gaggatcaga ggaccggca 9480
gaccaagatc ctggaggagg acctggaaca gatcaagctg tccttgagag agcgaggccg 9540
ggagctgacc actcagaggc agctgatgca ggaacgggca gaggaaggga agggcccaag 9600
taaagcacag cgcgggagcc tagagcacat gaagctgatc ctgctgata aggagaagga 9660
ggtggaatgt cagcaggagc atatccatga actccaggag ctcaaagacc agctggagca 9720
gcagctccag ggctgcaca ggaaggtagg tgagaccagc ctccctcctgt cccagcgaga 9780
gcaggaaata gtggtcctgc agcagcaact gcaggaagcc agggaacaag gggagctgaa 9840
ggagcagtca cttcagagtc aactggatga ggcccagaga gccctagccc agagggacca 9900
ggaactggag gctctgcagc aagaacagca gcaggccag ggacaggagg agagggtgaa 9960
ggaaaaggca gacgccctcc agggagctct ggagcaagcc catatgacac tgaaggagcg 10020
tcattggagag cttcaggacc acaaggaaca ggcacgaagg ctggagggaag agctggcagt 10080
ggaggggacgg cgggtccagg ccctggagga ggtgctggga gacctaaagg ctgagtctcg 10140
ggaacaggag aaagctctgt tggccctcca gcagcagtgt gctgagcagg cacaggagca 10200
tgagggtggag accagggccc tgcaggacag ctggctgcag gcccaggcag tgctcaagga 10260
acgggaccag gagctggaag ctctgcgggc agaaagttag tcctcccgcc atcaggagga 10320
ggctgcccgg gcccggtctg aggtctctgc ggaggccctt ggcaaggctc atgctgccct 10380
gcaggggaaa gagcagcatc tcctcgagca ggcagaattg agccgcagtc tggaggccag 10440
cactgcaacc ctgcaagcct ccctggatgc ctgccaggca cacagtcggc agctggagga 10500
ggctctgagg atacaagaag gtgagatcca ggaccaggat ctccgatacc aggaggatgt 10560
gcagcagctg cagcaggcac ttgccagag ggatgaagag ctgagacatc agcaggaacg 10620
ggagcagctg ctggagaagt ctctggccca gaggggtccaa gagaatatga tccaagagaa 10680
gcagaatctg gggcaagaga gagaagagga ggagataagg ggccttcac agagtgtaa 10740
ggagctacag ctgactctag cccaaaagga acaggagatt ctggagctga gggagacca 10800
gcaaaggaac aacctggaag ccttacccca cagccacaaa acctcccaa tggaggaaca 10860
atctctaaaa cttgattctt tagagcccag gctgcagcgg gagctggagc ggctacaggc 10920
agccctgaga cagacagaag ccaggagat tgagtggagg gagaaggccc aggacttggc 10980
actctcccta gcgcagacca aggccagtgt cagcagctct caggaggtag ccatgttcct 11040
acaagcctct gtcttgagc gggactcaga acagcaaagg ctgcaggatg aactggagct 11100
caccagacgg gctctggaga aggagcggct acacagccca ggtgcaacca gcacagcaga 11160
actggggctc agaggggagc aggggtgtgc gctgggagag gtctcaggag tggaggctga 11220
gcctagtcct gatggaatgg agaagcagtc atggagacaa aggcttgaac acctgcagca 11280
agcagtgggc cggctggaga ttgacaggag caggctgcag cgcacaaatg tccagctgcg 11340
gagtaccttg gagcaggatg ggagaggaca gaagaactca gatgccaaat gtgtggctga 11400
actgcagaaa gaggtggctc tgctgcaagc tcagctgact ttggagcgga agcagaagca 11460
ggactacatc acccgctcag cacagaccag ccgtgagcta gcaggcctgc accacagcct 11520
ctcacactca cttcttgccg tggcccaggc ccctgaggcc actgtcctgg aggcagagac 11580

```

ccgcaggctg gatgagtcctc tgactcaaag tctgacatcc ccagggccag tcttgctaca 11640
 ccccgagcccc agcactaccc aagccgcctc caggtag 11677

<210> 135
 <211> 862
 <212> DNA
 <213> Homo sapiens

<400> 135
 gttcttttcc gcaatgacta gtgtcaagct catgtactct tctgattcta gactggagaa 60
 gattattcaa acttgatctg tgtttcaggt ttttaaagt cctaaaaaca gaaaattaga 120
 ttcagatctc aaaaaaggaa ttttggaattg actttcaaag tactaatact aattatactt 180
 ttcttttggg agcgtgactc ttcttatacc taagaacata ttacaaatgt caaaaccatt 240
 gcattttgac attgcaaaac atgccttgaa ctcttgaaact actgtgaaaa gaatcaccgt 300
 tgtaaagact ttttgtaagc tagctgatac tcttaagtat gtaaaaagat tgtctttcag 360
 ccgacaggcc caaaggaatg tatataagga aggaatatga aaaaataaat taggttttaa 420
 aataggaatt gggcaataaa ctgtatcaaa aatatgtaga tggatttttag tagttgtaat 480
 ttaaagtgtg aaggtgaaga gaatttcaaa ctccaaagag aaatgaatga tattcagatg 540
 tttcattaat ttctagtctg tgaaaatatg catttttatag taatatgtat agacttattt 600
 tatttagaaa taatagtgtt ttagaattta ttaaaaactc agtgatagcc tttataccaa 660
 aatgtttaac tttaccaaca gcaagtcata aaagtattta ttttaaagct ttttaattatt 720
 atcgtgtaac tttcatctgt ctccagatgt aaataattat ctgcctaaat gttatatattt 780
 tatgtatgca ttttctgaaa atgtattgtt ttgtaaagtg ggaaagataa taaatcaagc 840
 acttcttgca cttgtttctg tg 862

<210> 136
 <211> 1026
 <212> DNA
 <213> Homo sapiens

<400> 136
 gccctttttt tctctttata caaatgaga gtatctgagc caaatatta aattctagtt 60
 cttttccgca atgactagtg tcaagctcat gtactcttct gattctagac tggagaagat 120
 tattcaaact tgatctgtgt ttcaggtttt taaatgtcct aaaaacagaa aattagattc 180
 agatctcaaa aaaggaattt tggattgact ttcaaagtac taataactaat tatacttttc 240
 ttttggtagc gtgactcttc ttatacctaa gaacatatta caaatgtcaa aaccattgca 300
 ttttgacatt gcaaaacatg ccttgaactc ttgaactact gtgaaaagaa tcaccgttgt 360
 aaagactttt tgtaagctag ctgatactct taagtatgta aaaagattgt ctttcagccg 420
 acaggcccaa aggaatgtat ataaggaagg aatatgaaaa aataaattag gttttaaaaat 480
 aggaattggg caataaactg tatcaaaaat atgtagatgg attttagtag ttgtaattta 540
 aatgtggaag gtgaagagaa tttcaaactc caaagagaaa tgaatgatat tcagatgttt 600
 cattaatttc tagtctgtga aaatatgcat tttatagtaa tatgtataga cttattttat 660
 ttagaaataa tagtgtttta gaatttatta aaaactcagt gatagccttt ataccaaaat 720
 gtttaacttt accaacagca agtcataaaa gtatttattt taaagctttt taatattatc 780
 gtgtaacttt catctgtctt cagatgtaaa taattatctg cctaaatgtt atatttttat 840
 gtatgcattt tctgaaaatg tattgttttg taaagtggga aagataataa atcaagcact 900

tcttgcaactt gtttctgtga agcatataga actctatctt aaataaggac gatgtgtcgt 960
 acaacaacaa atctacttgc ccgtcgggtt cccggctgcg atctggccct tgccgtacca 1020
 catttc 1026

<210> 137
 <211> 611
 <212> DNA
 <213> Homo sapiens

<400> 137
 gaattttaat agggccacta agaatctgag tgcttttagga gattaccctt ataccactg 60
 ccatcacatc cagtcaggcc tgttgtgctc tatataaatc tccccagctg aggggcaggt 120
 gcgggctaaa atccaactgg caattggctc ccagacataa ttttatattt tacagagaag 180
 catcttattg gcttatatgt gtttaaagaa tggctcggct tatacatctt cagaaaatga 240
 gaattaaaaa gtcaaaataa ttcttgacat ctacagattg aacaaagaac ttagaagaaa 300
 taatacttta tcttttcac cttggcattcc tgagagaaga gaaattgatt gtttatcatg 360
 ttggtttaat ttttcaacct agacaatctg cagcaaggca catggacccc aattttgata 420
 tcgtccatac agttttcatt ctatgcatgg agctaattac tgactttgcc tgtaaagaga 480
 ggattgtgtg cctaaatttt gtctaacaaa tgcaagcgta gaatgacatt tactaatatt 540
 tctatttctt ccataggcta aataatagta actaagtatt ttaaggaca cagccctttt 600
 tttctcttta t 611

<210> 138
 <211> 787
 <212> DNA
 <213> Homo sapiens

<400> 138
 gagaaacaaa agctaattag ccttgggtgt ctgcttagcc ccgtgggttg agcaggagct 60
 cttgacttcc ggtcttgga ctctcgccaa tagtgtgtgg aattgcactc tcacacctgc 120
 tgggagacct tgcttttcaa gggggtgtac agctcctcac cccagaaaaa tttgagatct 180
 actggtttgg agggaaatgg gagataagaa tcttatgact taaggaaaac ttattttttg 240
 ttatcaaatt atagtgttcc ccattgaaaa tttcctttaa aactgtaaag atctttagga 300
 agtagagagt ggaagccgat gctgttctgt tcccagggtt cactgcagc tgttcccag 360
 ggtcacctcc agctgttccc gagagtcacc tccagctgtt cccgagggtc acctccagct 420
 gggtgggtgc atgttcttac acaagattgt aagagacgat ctatgctgtt ctgctgtat 480
 tacttgggag gcctttggct caaatgatgg aaaactctgc cccaaactca ctaatgaata 540
 aagaaatgga tcatctcatg gatgagggcg tccagaggac aagggtggcc ctggggcag 600
 gggtgggtgc tgctgtcatc caggacttgg gtcccgctct ctgcccctctg ccacctctg 660
 tgctggcgctc aagggtggca ggtgtgagtt tcccagagtc acatcagctg cgacaaaatc 720
 cagaggcagg aaagacctag agttcttcta aacaatgagg aaattaacat gtaaccagct 780
 agaagtg 787

<210> 139
 <211> 927

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (568) .. (738)

<223> a, c, g or t

<400> 139

tcaaagtgtga	tagtaaatat	ctaacaacaa	gaaagggaca	agatatagaa	ggaatcttag	60
gatcagctga	gagataattg	aatacttttc	taaaagaaca	caatactgga	agggatgggg	120
ctttgtggga	caattgctat	tttgaattct	taggtgtcca	actttacaac	caagggtttac	180
aaatatttta	aatggtgatt	tagtcagcag	aagggaagac	tcaaatagaa	cataattagc	240
ttaagcttac	ctctagttgt	agagtataca	ggttttgacc	tcaaaatttg	aaaaatcgca	300
atttttatct	aagtgcatac	aagttttcct	tatttgggga	tggccataat	tgtctctcat	360
ggcaactcaa	ctgtatgcaa	cattgaacca	tcctttgttg	caaaggaacc	tgccctgggcc	420
tgcttcctgt	tagataaatg	gtcccaactg	gcataactta	caagtttggt	acataaaacta	480
tctgattaca	atactaacgc	tatacgtgag	caggtagtaa	aatatgggca	tttacatcat	540
ttattcacca	agaactgtaa	ttaggcannn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	600
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	660
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	720
nnnnnnnnnn	nnnnnnnnngc	tcttggttag	tttctgtttc	ccactgggtg	taggggtttta	780
acttctgttg	attcacagga	tgcaggtggg	ggagagatgg	caagggggaa	aatatgaatt	840
tgattactca	agtgaacaa	ggtgaaacca	ttagtttaaa	ataattttag	gctgaaaaat	900
taaaatcatt	aaattatttc	cttcattg				927

<210> 140

<211> 4651

<212> DNA

<213> Homo sapiens

<400> 140

gaaacttgaa	aaaaaaagac	agttaatcct	cattatttgt	ggattctgta	tttgtgaatt	60
tgctgctcg	ttaaaattta	gaacacccca	gtggatcctc	ggtgcttctg	tggcatggg	120
cgtgggcaga	gctgcctttg	ttttactg	tcagggtgaa	acagtgtcct	tttcgtcatt	180
tatttagtgc	catgtttttt	accttttttt	tttttttctt	ttttccctga	gacagggttt	240
tgctctgtca	cccaggctgg	agtgcagtgg	tgtgatctca	tctcactgca	acctccacct	300
cccaggctta	agctgtcctc	ctgcctcagc	cttccaagta	gctgggacta	cagggtgtgga	360
ccatcatgtc	tgggtcattt	tttgtatttt	ttgacatgtt	acctcaggctg	gtcttaaact	420
cctgggctca	agtgatcctt	ccgcctcggc	ctcccaaagt	gctgggatta	cagggtgtgag	480
ctaccgcgcc	cggccatttt	gcacattttt	gtgctttatg	ttggtgattt	tggtttttga	540
aatggcccg	tgatgtagtg	cagtctagtg	ttcctgggtg	caagaagggt	atgacgtgca	600
gagaaaatcc	ctgtgctaga	gaagcacaag	ctaaggcatg	agttaatgtg	ctgttgcca	660
cgagttcaat	gagaatgaat	caatagtata	tgttaaatag	agtcttttaa	gcacaaacag	720
acataaaaata	ggtttatgta	ttgattgggt	gacaaaaatg	tcatgcccaa	agactggcag	780
gaacctaacc	ctgtgtttcc	cctgtgagca	gtggttcagc	attgactaat	tcactgttct	840
tcatgacttg	aaagagcata	actgcagtat	atgatgacga	gtaaccgtaa	ttcaaagtag	900


```

aatcacaaac ttcaggagac atctgaaaag aatgatgtct ctgaaagctg tccttttcaga 3840
tgaggggagaa atgaaggatt tcacacttca gaatatTTTta ctaaaaacat tccagtcttg 3900
gccgggtgcg gtggctcctg cctataatcc cagcactttg ggaggctgag gtggggaggat 3960
cacttgagcc caggagttca aggctgcagt gaataatggg tgcaccattg cactctagct 4020
tggggggacag cgtgagaccc tgtctctata ttaaattTTta aaatataata aaagagaaaag 4080
aaaatgccta attacagttc ttggtgaata aatgatgtaa atgcccata tttactacct 4140
gctcacgtat agcgttagta ttgtaatcag atagtttatg taccaaactt gtaagttatg 4200
ccagttggga ccatttatct aacaggaagc agggccaggc aggttccttt gcaacaaaag 4260
atgggttcaat gttgcataca gttgagttgc catgagagac aattatggcc atccccaaat 4320
aaggaaaact tgattgcact tagataaaaa ttgcgatttt tcaaattttg aggtcaaaac 4380
ctgtatactc tacaactaga ggtaagctta agctaattat gttctatttg agtcttccct 4440
tctgctgact aaatcaccat ttaaaatatt tgtaaaccct gggtgtaaag ttggacacct 4500
aagaattcaa aatagcaatt gtcccacaaa gcccacatcc tccagttatt gtgttctttt 4560
aggaaagtat tcaattatct ctcagctgat cctaagattc cttctatata ttgtcccttt 4620
catttgttta gatatttact atacactttg a 4651

```

```

<210> 141
<211> 147
<212> DNA
<213> Homo sapiens

```

```

<400> 141
actggcagtg cctgggtcaa gaggtactca aatgtatttt aatcatttaa atgattgact 60
gcaaggtttc cagctttgag atgaatagga taatgatgtc atcatgaaca cagaagtaaa 120
tgcgtgtttg gcaataaaaag agatggg 147

```

```

<210> 142
<211> 417
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (4)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (56)
<223> a, c, g or t

```

```

<400> 142
gaantaaat caattagcca gatttgtaac tttaaagcta ccacagtgag attttnctct 60
taaaaacatg catgttttta tattgtattc tttaatatTT atattgtaca gttacatgtg 120
acacatatta catatgacta atttatatgt agcaacaggg attaaagaag acctctttta 180
attgtaccac ttgttataat gctattattt acccagattc aaatgtaact acttacaatt 240

```


ttggacatgt gtcttaccct ctctgagcct taaatttcct tctctggaaa atcaatgctt 960
catcaaataa aaagtgatca tg 982

<210> 145
<211> 601
<212> DNA
<213> Homo sapiens

<400> 145
aacagccttt ctgacccac agtgaggaga aactgaggca accgaagcct tgaggagggg 60
tctttcacca gtgtgagcat agctgacttt gggattcttt tgttgatgatc tgtggatcaa 120
tctgtccct gagctctcct gattttgtta taacagcaga gtccacttag attttaacca 180
tttgatcagc agagccttgt ttttggcctg ttgtgctgca tgatttacag tgtgcatctg 240
gatttgtaat tatgcctcac atagtttata ttttgattca cttcaggcct ttctgctttc 300
tcctctttac ctgcctctag ggccatatgg agtggaagtt tgcattgtgt tgtaaaagca 360
ttttgaaatg ttcatcagac tttcatgggt tccttacttc ccttttaggt tttgcatttt 420
aaattagggt atagaattgt gaatttacca aactatattg tggattttat tcaaacagtt 480
tctgtgggta tgaaatactg gtcattgtgt tgtatcaata ttttatatgg aatcattata 540
tttcttgggg ttaggctgac aaaaaacaat ctgttagctt cattcatgag aggtattcag 600
a 601

<210> 146
<211> 247
<212> DNA
<213> Homo sapiens

<400> 146
gttgatagct taatgatttc aaagaattat tatacattga aacacaaggt cagtcagtgg 60
ctggaaatga atgcacacat ttgaagttag aggactgctg agagcttggt ggggtggttg 120
gacctcagtc ctaggttctc tctgccccga cttcttgga agggggaata gagttagctc 180
aggaaacaaa ggtaaaagcc cattttccac aactaggtaa accaatgtaa gcattaagga 240
tattaaa 247

<210> 147
<211> 424
<212> DNA
<213> Homo sapiens

<400> 147
gggggaattc agctaaaata ttaaagttgc taattctgag tcttggcaga tggctggaag 60
tccaagtcatt cttttttctg agactcttgt gcatatggat ggtttttggg tgggtctgct 120
atctgaagta tctgacgtgg taggtattat gggcaaatga taatgttcgt atttgaatag 180
ttgatagctt aatgatttca aagaattatt atacattgaa acacaaggct agtcagtggc 240
tggaatgaa tgcacacatt tgaagtgaga ggactgctga gagcttggtg ggtggttggg 300
acctcagtc taggttctct ctgccccgac cttctggcaa ggggaataga gttagctcag 360

gaaacaaagg taaaagccca tttccacaa ctaggtaaac caagtaagca ttaaggatat 420
 taaa 424

<210> 148
 <211> 574
 <212> DNA
 <213> Homo sapiens

<400> 148
 ctcgtcttgg ccctccaaat tggtgggatt acaaagtgt acatgccag ccaagagttt 60
 taaaaggga ggacatgacc agatttatgt taagagtta ccagacttc tgtgcataaa 120
 atcaattagt ggaagaaaat aggctgtgat gtgacacata aggaagccag tatagaattg 180
 aataagaagt aatgaagggg cttagatgag gttaatatat ttgctaccat cagagagaat 240
 ggaacacaca tgagaaatat ctacaaagtg aatttgggtg aacttggga cagttgcata 300
 tgggtggacca gtttacaagg ctgatgctca ggctgtggct tgggtgggtt gttggatgtt 360
 ggattaactg agacaaggag actgaccaag tagtttccct cttctctgg gctttacttt 420
 cttccatagt tccttcctcc tttcatagtc tagatttcta cttctcagaa aatttctctg 480
 caagacggtg gaggcaaaat gtgggaagg atgttgacat caataggacc tgttagcctc 540
 tgaacatctt gccaggctgg cttcagcaga ggac 574

<210> 149
 <211> 248
 <212> DNA
 <213> Homo sapiens

<400> 149
 ccactttggc taatgtaaaa aaaaaatgtg aggtgttctt aaacaaaaac ttctcaaattc 60
 ctaacttaac gtaatctacc tgaaatcaat gttatgggta ctggcattga caagactgga 120
 agagaaataa cttttcgtaa cagctcatct tcacatagct aatgatagg accattgttt 180
 tttgggcaaa gtgatggggg aggatattaa ctatttcaaa gggtgttcaa aatgactaaa 240
 atataaca 248

<210> 150
 <211> 109
 <212> DNA
 <213> Homo sapiens

<400> 150
 tttagaaagg tattcttgag cactatatga aagtaacata ttactacca attgttcttg 60
 tttgaaggaa aattcctgtc ttttcagtta aaaagataag ttttgtcta 109

<210> 151
 <211> 944
 <212> DNA

<213> Homo sapiens

<400> 151

```

atttgacttt attcattgct gtgcaaacct ttttttgcag catatactcg ggcactacat 60
tcattcatca attcctgtga tgtccctggg ggtaattcaa ctcttcgagt cgcaattcat 120
aattttgctt ctgcacacag gcggaactttg aaaaatctat aataagaatc tgaaattaac 180
tggtagtatt ttggctttta cttaaaatta tccctgagag agtatttaag aaaagctggt 240
caagttataa aatatataat ctgggaagaa atactgtctc atataataat tagattgtaa 300
tcattgtttt aatctctgtc tgggaaccaa gattgaaagc tgacttactt ctctcttctg 360
tcttgtaaac catacggagc ctattatttt aaaatatgat cagacaagta aggcttctct 420
tactttgctc tgctctgac agaagagctc atgtgaagtc tttgagattc tcttatttat 480
catctttcta aaactgtggt tttgagcttg acagtactga aaatgtctgg atgaagcaga 540
aaagaaagtg atgaaatgtg tttctgagca tcagagacca tctatattgc cattaccttt 600
tctagtgtga tataagaatt caagattaga agaatttaga tttgttgac atttttttcc 660
tcagcatttt ttcctcttgt tttttaaaat gtattgcctc tttccccatt cagtgcact 720
ggacatagga atttttaatt gtgtaatttt ctgttgcaaa aagggtaaat aaatcctttg 780
tcttttgaat atcttctatg tgaaataatt gtgagtgaca tttgaaaaag tgaatctgaa 840
gtcaaagtga gtaaattcct tatttccta ttttttaaaa acctggtata tgacatggct 900
acagggcaaa tgaaataaaa attgccatag ttggtatgaa aaaa 944

```

<210> 152

<211> 3897

<212> DNA

<213> Homo sapiens

<400> 152

```

ataaggtac ggatgggcgg gacggagcag cccaccgcaa agtggcggtt tacttgaggc 60
ggttacctta gtactccgag tagactgagt ctgtggcgag ctgcgggcgg attcctggcc 120
agtgccatct cagccggagc aggcctcggg gcctcagaag caggctttta tctggcccga 180
ggctcccagc cgttcagcgc gtcttcccat aacctatacc gattattggg actctcggct 240
gcagacacag gagtcacaga tgctgggaag tatggcccga aagaaacctc gaaataacctc 300
aagggtgccc ctggctttaa accccctgaa gagcaaggac gtgttggcag tgctggctga 360
gaggaacgag gctatagtac cagttggggc atgggtggaa cctgcctcac caggtagttc 420
ggaaatccca gcatatacat cagcatattt aattgaagaa gaactaaagg aacagctaag 480
aaaaaaacaa gaagctttga aacattttca gaaacaagtt aaataccgag taaatcaaca 540
aattaggttg agaaaaaagc aacagcttca gaagtcttat gaaagagcac aaaaagaagg 600
ctccatagcc atgcagtcct cagcaacaca cttaacttcc aaaaggacaa gtgtttttcc 660
aaacaatttg aatgttgcta ttggaagttc taggttacct ccttccctga tgcctgggga 720
tggaatagag gatgaagaga atcagaacga attattccaa caacaagccc aggctcttag 780
tgaaactatg aaacaggcac gtcaccggct agcatccttt aaaaccgtga ttaaaaaaaa 840
gggatcagtg tttccagatg atggaaggaa aagctttctt accagagagg aagtgttttc 900
caggaaacca gcatccactg ggataaatac aggaataaga ggagagttgc ccattaaggt 960
ccatcaaggt cttttagctg ctgtacctta ccagaattat atggaaaatc aggaacttga 1020
ctatgaggaa cctgactatg aggaatcttc atctcttgta actgatgaga aagggaaaga 1080
agatttgttt gggagaggcc agcaggacca gcaggctatc cattctgaag ataagaacaa 1140
acctttcagc agagttcaga aagtaaaatt caaaaatcca ttatttgttc tgatggaaga 1200
ggaagaacaa aagcagttac attttgaggg ccttcaggat attctgccag aagcccagga 1260

```

```

ttatcttcta gaagcccaag gtgatttgct ggaaaccag ggtgatttga caggaatcca 1320
gagtgttaag ccagataccc aggcgtgtga aatgaagggt caggttactg agccagaagg 1380
ccaggccatt gagccagaag gccagcctat taagacagaa actcagggtg ttatgctgaa 1440
agcccagagt attgagctag aagaaggag tattgtgttg aaaaccaggt attttctacc 1500
cacaaatcag gctcttctaa cgaaaaacca ggatgtttta ctcaaagacc actgtgttct 1560
ccctaaagac cagagtattc tactcaaata tcaggaccag gacttcctac ccagagacca 1620
gcatgttctc cacaaagacc aagatattct gccaaaatat caggaccaga attttctacc 1680
taaggaccag aatcttttat ctagagacca gcatgttctc cccaaagacc aagatattct 1740
gccaaaatat caggaccaga attttctacc taaggaccag aatcttttgt ctagagacca 1800
gcatgttctc cccaaagacc agaattattct acctaaatat caaggccagg attttctacc 1860
taaagaccag gactttttat ctagagacca gcatgttctc cccaaagact ggaattattct 1920
acccaaatgt caggaccagg attttctacc cagagaccaaa ggtgttcttc ccaaagacca 1980
aaatattcta cccatattgtc aggaccagga ttttctaccc agagaccaag gttatcttcc 2040
taaagaccaa aatattctac ccatattgtc ggaccgggat tttctacca gagacctgca 2100
tgttctctcc aacgaccaga atattctacc caaatgtcag gaccaagatt ttctaccaa 2160
atatcagaaa gtacacttta aggagccata ctctgatatg acagatgaga aaggggagaga 2220
agacttttct ctggcagact atcagtgttt gcctcccaaa tcccaggacc aggatgacat 2280
caaaaatcag caacctgcat cttttatgag agaagaaaga gtgagagagg aattgcctct 2340
ggactatcat caatatgttg tacctaaaat ccaggaccaaa gactccccta gagaacagaa 2400
caagcatatc aaactaccct catcttttga gaaatgggag attgcaagag gaaatactcc 2460
tggagtgcc aatggttatg ataggtatca atcaggattg agcactgaat tccaagctcc 2520
actggcattt cagtctgacg tggataaaga agaagataag aaagagcgtc aaaagcagta 2580
cctgagacat agacgacttt tcatggatat tgagagagaa caagttaaag aacaacaaag 2640
gcaaaaagaa caaaagaaga aaattgaaaa aattaagaaa aagagagagc aagaatgtta 2700
tgctgcagag cagaggatcc taagaatgaa ctttcatgaa gatccatatt caggagagaa 2760
gttgagtgag atattagccc agttacaact tcaagaaata aaaggaacca gagaaaaaca 2820
acagagagaa aaagaatacc tgagatatgt agaagcttta cgagcccaaa tccaggagaa 2880
aatgcagctg tataatatta ctttacctcc actatgctgt tgttgtcctg atttttggga 2940
tgctcatcct gatacctgtg ccaacaactg tattttctat aaaaaccaca gagcatatac 3000
tcgggcacta cattcattca tcaattcctg tgatgtccct gggggtaatt caactcttcg 3060
agtgcgaatt cataattttg cttctgcaca caggcggact ttgaaaaatc tataataaga 3120
atctgaaatt aactggtagt attttggtt ttacttaaaa ttatccctga gagagtattt 3180
aagaaaagct gttcaagtta taaaatatat aatctgggaa gaaatactgt ctcatataat 3240
aattagattg taatcattgt tttaatctct gtctgggaac caagattgaa agctgactta 3300
cttctctctt ctgtcttgtg aaccatacgg agcctattat tttaaaatat gatcagacaa 3360
gtaaggcttc tcttactttg ctctgctctg atcagaagag ctcatgtgaa gtctttgaga 3420
ttctcttatt tatcatcttt ctaaaactgt gtttttgagc ttgacagtac tgaaaatgtc 3480
tggtgaagc agaaaagaaa gtgatgaaat gtgtttctga gcatcagaga ccatctatat 3540
tgccattacc ttttctagtt gtatataaga attcaagatt agaagaattt agatttggtg 3600
cacatctttt tcctcagcat ttttctctct tgttttttta aatgtattgc ctctttcccc 3660
attcagtgac actggacata ggaattttta attgtgtaat tttctgttgc aaaaagggtg 3720
aataaatcct ttgtcttttg aatatcttct atgtgaaata attgtgagtg acatttgaaa 3780
aagtgaatct gaagtcaaag tgagtaaatt ccttatttcc ctatttttta aaaacctggg 3840
atatgacatg gctacagggc aaatgaaata aaaattgcca tagttggtat gaaaaaa 3897

```

<210> 153

<211> 542

<212> DNA

<213> Homo sapiens

<400> 153

```

tagaatagaa atattaagga atctggctat ttatcctaga ttctattcca agcgcaactca 60
tgacagtgat ttcaagtga cacttttaaaa gaattttcat tctgaacatt ttaatttttt 120
gtttattcat gtttttgacc tgaacccttt tcttcgattt attattttat gtttggttac 180
ttccttctga aacggcttcc ttctattctt ttttgatttt attctttata ttcattgttt 240
ttccccttct ttatccaatt gagcccaagt ttgcaaaaga aaagaacaga taaaaatatc 300
aaaattgttc atggggtagt ttttggtaat tttgtcactt tgtgtgactg gaccttctta 360
acaggcttat gataggatc aatcaggatt gagcactgaa ttccaagctc cactggcatt 420
tcagtctgac gtggataaag aagaagataa gaaagaggta tgtaatgata ctgcttttgg 480
atcccaatat ttctactatg atagtattaa tatatgagaa attggaaaca atttgttgtg 540
tc                                                                                   542

```

<210> 154

<211> 869

<212> DNA

<213> Homo sapiens

<400> 154

```

ggtagttttt ggtaattttg tcactttgtg tgactggacc ttctaacagg cttatgatag 60
gtatcaatca ggattgagca ctgaattcca agctccactg gcatttcagt ctgacgtgga 120
taaagaagaa gataagaaag agcgtcaaaa gcagtacctg agacatagac gacttttcat 180
ggatattgag agagaacaag tttaaagaaca acaaaggcaa aaagaacaaa agaagaaaat 240
tgaaaaaatt aagaaaaaga gagagcaaga atgttatgct gcagagcaga ggatcctaag 300
aatgaacttt catgaagatc catattcagg agagaagttg agtgagatat tagcccagtt 360
acaacttcaa gaaataaaaag gaaccagaga aaaacaacag agagaaaaag aatacctgag 420
atatgtagaa gctttacgag cccaaatcca ggagaaaatg cagctgtata atattacttt 480
acctccacta tgctgttgtg gtccctgattt ttgggatgct catcctgata cctgtgccaa 540
caactgtatt ttctataaaa accacagagc atatactcg gcaactacatt cattcatcaa 600
ttcctgtgat gtccctgggg gtaattcaac tcttcgagtc gcaattcata attttgcttc 660
tgcacacagg cggactttga aaaatctata ataagaatct gaaattact ggtagtattt 720
gggcttttac ttgaaaatca tccctgagag agtattaaga aaagctgttc aagttataaa 780
atatataatc tggaaagaaa tactgtctca tataataatt agattgtaat cattgtttta 840
atctctgtct gggaaccaag attgaaagc                                                                                   869

```

<210> 155

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 155

```

ggtagttttt ggtaattttg tcactttgtg tgactggacc ttctaacagg cttatgatag 60
gtatcaatca ggattgagca ctgaattcca agctccactg gcatttcagt ctgacgtgga 120
taaagaagaa gataagaaag agcgtcaaaa gcagtacctg agacatagac gacttttcat 180

```

```

ggatattgag agagaacaag ttaaagaaca acaaaggcaa aaagaacaaa agaagaaaat 240
tgaaaaaatt aagaaaaaga gagagcaaga atgttatgct gcagagcaga ggatcctaag 300
aatgaacttt catgaagatc catattcagg agagaagttg agtgagatat tagcccagtt 360
acaacttcaa gaaataaaag gaaccagaga aaaacaacag agagaaaaag aatacctgag 420
atatgtagaa gctttacgag cccaaatcca ggagaaaatg cagctgtata atattacttt 480
acctccacta tgctgttggt gtcctgattt ttgggatgct catcctgata cctgtgccaa 540
caactgtatt ttctataaaa accacagagc atatactcgg gcactacatt cattcatcaa 600
ttcctgtgat gtccctgggg gtaattcaac tcttcgagtc gcaattcata attttgcttc 660
tgcacacagg cggactttga aaaatctata ataagaatct gaaattaact ggtagtattt 720
gggcttttac ttaaaatcat ccctgagaga gtattaagaa aagctgttca agttataaaa 780
tatataatct ggaaagaaat actgtctcat ataataatta gattgtaatc attgttttaa 840
tctctgtctg ggaaccaaga ctgaaagctg acttacttct ctctctcttc ttgtgaacca 900
tacggagcct attattttaa aatatgatca gacaagtaag gcttctctta ctttgctctg 960
ctctgatcag aagagctcat gtgaagtctt tgagattctc ttatttatca tctttctaaa 1020
actgtgtttt tgagcttgac agtactgaaa atgtctggat gaagcagaaa agaaagtgat 1080
gaaatgtgtt tctgagcatc agagaccatc tatattgcc aacacctttc tagttgtata 1140
taagaattca agattagaag aatttagatt tgttgcacat ttttttctc agcatttttt 1200
cctcttgttt tttaaaatgt attgcctctt tccccattca gtgacactgg acataggaat 1260
ttttaattgt gtaattttct gttgcaaaaa gggtaataaa atcctttgtc ttttgaatat 1320
cttctatgtg aaataaaaaa aaaaaaaaaa aaaaaaaaaa aaaattggcg gcc 1373

```

<210> 156

<211> 338

<212> DNA

<213> Homo sapiens

<400> 156

```

ctcctttttc aaaccgaaat ctgcagtgtt tgggtgcagtt tcaagaacaa agtagtggtc 60
aacgaatact tgttgaataa atgaagggaa gaattcttga aatcattctc ccttttgctt 120
aaagattgca gtgaacttac accaaattag gcattcattg aattagctaa tattactttg 180
taaaaatata agtaccttca gtagagtcag aaactctcag gttaatagaa atgaattagt 240
ttagatttct gtcttcttaa catctaaatg aaattagctg cattgaagaa acataagttt 300
aattgagggg gcaaggtgca ggggagagtc tgggagaa 338

```

<210> 157

<211> 56

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (45)..(46)

<223> a, c, g or t

<400> 157

```

gggaggggat ggagagtgtc tgatggatac agggttattt tttgnngggg cggggg 56

```

```
<210> 158
<211> 613
<212> DNA
<213> Homo sapiens
```

<400> 158						
ttaacttcat	tttaaggttag	atgaagattt	agttatctta	tgttcaccct	ttctccatac	60
cctccactcc	caccatcact	gccacatcat	ctgtcctctt	ccccattctc	ccagtattgt	120
aatatagttt	gatcagaact	cttgggttaag	tcactagtgt	ttacattact	atggctgtgt	180
cactattttct	ctctgctgac	ccaagcatga	cactgattag	gtttcctttc	tcataataact	240
cttgtccttg	gattcagtg	ccctcatttt	tttcttttgc	tttgttttct	gttactgttc	300
atcacatatt	ttatacagct	gtcgatgtta	tttattcaaa	cgatgtacca	gttcattttg	360
tttgtttggt	tctgggagact	ccctctggag	ctttccacct	tcttggctct	aatctggact	420
ggttgcttta	ggcctgtgg	ctaaacagct	gttatttcag	gacttccttg	actgttctcc	480
tttgtttgcc	ctttttttct	gatctcatgg	gttttttgtg	tgtacttttt	ttatcttgct	540
tacaccctca	ttttgctgg	acttatcttt	cagtggcttt	tctaagaaag	attatgtagg	600
aagtagattt	ttt					613

```
<210> 159
<211> 6239
<212> DNA
<213> Homo sapiens
```

<400>	159						
tttttttttt	agctgggtgt	agtgggtcgt	gcctgtagtc	ccagctacgt	gagaggccga	60	
ggtgggatga	tctcttgagc	ctaggaggtt	gaggctgcag	tgagtgggtga	ttgcactact	120	
gcactctagc	ctaggctata	gagtgcagacc	ctgtctcaaa	aatacaaaata	aataaaattaa	180	
ataaaaagaag	agggctgtcc	cagttcttca	gaataaccaa	aggtggaatg	gtgagaggac	240	
agtattttca	tttactttct	aagcattaat	acctcaataa	ttgggaaaaa	aattaaaggc	300	
aagaagatga	aaaataagaa	aaaagaggac	atttaggaga	tcagtccagg	agggtttaag	360	
atccaagtgc	taagcacaca	aattaaacaa	acaaacaaaa	agtcacatag	aaggaatgag	420	
aatgacatgg	aacctttaaa	agaaaaaaag	caatgtctat	aaattatgaa	gaaaaataat	480	
tttaaactca	aaattatatc	ccagctaggt	tactaatcaa	aattagggtg	gaataaagat	540	
attttttaaat	ataaaaagaac	tatgggggat	ggtctcacat	ttggaaaaaac	aatcaaaata	600	
tacaagcagt	caaaaaaatc	tacttcctac	ataatctttc	ttagaaaagc	cactgaaaga	660	
taagtaccag	caaaatgagg	gtgtaagcaa	gataaaaaaa	gtacacacaa	aaaacccatg	720	
agatcagaaa	aaaagggcaa	acaaaggaga	acagtcaagg	aagtcctgaa	ataacagctg	780	
tttagaccac	aggcctaaag	caaccagtc	agattagagc	caggaagggtg	gaaagctcca	840	
gagggaggtc	tccagaaaca	aacaaacaaa	tggaaactggt	acatcgtttg	aataaataac	900	
atcgacagct	gtataaaata	tgtgatgaac	agtaacagaa	aacaaagcaa	aagaaaaaaa	960	
tgagggccac	tgaatccaag	gacaagagtt	atatgagaaa	ggaaacctaa	tcagtgtcat	1020	
gcttgggtca	gcagagagaa	atagtgcac	agccatagta	atgtaaacac	tagtgactta	1080	
accaagagtt	ctgatcaaac	tatattacaa	tactgggaga	atgggggaaga	ggacagatga	1140	
tgtggcagtg	atgggtgggag	tggagggtat	ggagaaaagg	tgaacataag	ataactaaat	1200	
cttcactctac	cttaaaatga	agttaatggg	cagtgtttta	aattgataag	aatagccat	1260	

aagagcatat ttgaaaatat gaaggaaaaa aatagctcaa gtggttgccct ctgggcaggg 1320
gattagaagg gatgggagag aaaactacag tttttgttat aagcttttcc tgccatttga 1380
tttgaaactg ggtccctccc tctatatgtc aaaattacaa tttgagatga gatttggggtg 1440
gggacacaga gccaaaccat atcaaactct gtgagaaaaat ttcaaactgc catcttagct 1500
cccagcccac ccacactggg tcttctacct ggctcctttt gctgcaggga gctgcccaag 1560
gtgtccctga ctatacccct gatgatgata gcaatgagca gacggggggt ctgcgggagt 1620
gggtgcagcca tagcaggatg ctgggcattg gggttcaaag agttcaaagg cgtgaagagc 1680
tgtcccagag aggtgaccct gagagacatc atttattgag agtttactcc aagccaagca 1740
tagggctaca tgggcttcat atgtgttgtt tccgatcctt acaacaacac atcaaacttt 1800
cacgcttcga tgaagcaagt agccatgttg aggaggttca cgtggcaaaa aagcgagaga 1860
agcttctggc caaagccagc aagttgctga atctcaccaa caacactgtg atcttggaag 1920
cagattcttc cccaattgag gatcagataa agcccagtc tggccaacac cttaagtgt 1980
gtctgaagcc gtggactgag ctaaaccaca ctgcatatta cagaaactgt gagataataa 2040
atacatgttg tttcaagctg ctaagtttct gccgctgccc caggccatgc cgccccatct 2100
gcgcgcggag ccgcggtgc cgggcctccg gggctgagcc gggagcgccg ggaggaggag 2160
gcgcccggcg cgagcagga gcgggagccg cggcgggggg cagcgcgga cccagtacta 2220
tggctgtgta ctgctatgcg ctcaatagcc tggatgatcat gaatagcgcc aacgagatga 2280
agagcgggcg cgccccggg cccagtggca gcgagacgcc cccgcccccg aggagggcag 2340
tgctgagccc cggcagcgtt ttcagccccg ggagaggcgc ctctttctct tccccccag 2400
ccgagtcgct gtcccccgag gagccccgga gccccggggg ctggcgagc ggccggcgca 2460
ggctgaatag tagcagcggc agtggcagcg gcagcagcg cagtagcgtg agcagcccaa 2520
gttgggctgg tcgcctgcga ggggaccggc agcaggtggt ggcagccggt accctctccc 2580
cgccagggcc ggaggaggcc aagaggaagc tgcggtctt gcagcgcgag ttgcagaacg 2640
tgcaggtgaa ccagaaagtg ggcatgtttg aggcgcacat ccaggcacag agctccgcca 2700
ttcaagcgcc ccgcagcccc cgtttgggca gggctcgtc gccctccccg tgccccctcc 2760
gcagcagcag tcagccccct ggaagggtcc tggttcagg cgcccgagc gaggaacgga 2820
ggacaaaagtc ctggggggag caatgtccag agacttcagg aaccgactcc gggaggaaag 2880
gagggcccag cctatgctcc tcgcaggtga agaaaggaat gccacctct cccggccggg 2940
ctgccccctac aggatcagag gctcagggtc catccgcttt tgtaaggatg gagaagggt 3000
tccctgccag tcccgcgtgt ggctcaccca cagctatgga aattgacaaa aggggctctc 3060
ctaccccggg aactcggagc tgcctagctc cctcattggg gctgttcgga gctagcttaa 3120
cgatggccac ggaagtggca gcgagagtta catccactgg gccacaccgt ccacaggatc 3180
ttgccctcac tgagccgtct gggagagccc gtgagcttga ggacctgcag ccccagagg 3240
ccctggtgga gaggcaggg cagtttcttg gcagtgcagc aagcccagcc ccagaaagg 3300
gcgggccccg cgatggagaa cccctggga agatggggaa aggatatctg ccctgtggca 3360
tgccgggctc tggggagcct gaagtgggca aaaggccaga ggagacgact gtgagcgtgc 3420
aaagcgcaga gtctctgat tccctgagct ggtccaggct gccagggcc ctggcctccg 3480
taggccctga ggaggccga agtggggccc ccgtggggcg gggcggttg cagctctccg 3540
acagagtgga gggagggtcc ccaacgctgg gcttgottg gggcagcccc tcagcacagc 3600
cggggaccgg gaatgtggag gcgggaattc cttctggcag aatgctggag cctttgccct 3660
gttgggacgc tgcgaaagat ctgaaagaac ctacgtgcc tcctggggac aggggtgggtg 3720
tgcagcctgg gaactccagg gtttggcagg gcaccatgga gaaagccggt ttggcttgga 3780
cgctggcac aggggtgcaa tcagagggga cttgggaaag ccagcgagc gacagtgatg 3840
ccctcccaag tccggagctg ctacccaag atccggacaa gcctttctct aggaaggcct 3900
gcagccccag caacatacct gctgtcatca ttacagacat gggcaccagc gaggatgggg 3960
ccttgaggga gacgcaggga agcctcggg gcaacctgcc cctgaggaaa ctgtcctct 4020
cctcggcctc ctccacgggc ttctctcat cctacgaaga ctgagaggag gacatctcca 4080
gtgaccctga gcgcaccctg gacccaact cagccttct gcataccctg gaccagcaga 4140

aacccatagagt	gaaatacacaga	accatctcgtga	agggtgaagaa	caaagaaaagg	gaatcaagcc	4200
ctgggaatgc	aagtttcttg	cttattcctg	tgactgctgc	cacagggata	agggtgctag	4260
gcttggttt	aggagacttg	ggtgaaattc	cagtctacac	atggctagca	agctctctga	4320
aaaatgggga	gagtaagtgt	gacctcatgg	agtgggtactg	ctatactgtg	aagcaccag	4380
gcagcctgga	gctgcacggc	ctgcgcacatga	gtccaacagg	tacaagctgt	tgtgggctta	4440
taatgtcagc	acctaagcag	gaattgaatg	caatcgagtt	gagttacctg	cctccagctc	4500
ccatagtgtg	ggtgaggaaa	agtggcttca	gtgctcagca	gagtgccttg	gactgcatca	4560
agcccagttc	gcctatcagg	gacagggtag	ctctcctgtg	ccctatgggc	ttcaaggcaa	4620
aagggtctta	tgaatcctgc	ctctggcaca	gcccagagtc	cagtggatatc	cggcagaagc	4680
agtgcctgtc	agctctgagc	tgggccctta	aggggaagag	ggagtacctc	cagcaatatt	4740
cagggtggat	gtgggttcca	gggcttctga	tcctggggct	gggcttgtct	gagattcaca	4800
ggagctcctt	gcaagttcag	cctgctggag	gtgtacacac	agaagcagca	gcccctggag	4860
cccttgga	ccagggagcc	atgtccgtca	catatgatgc	cttgaggggag	aaacagcagc	4920
tcagcaaagt	agggtgacttg	ccgcgcttga	catggccagg	tcctcttatc	agccagatgc	4980
cgggagtatt	ggattcctgc	cggctgtgca	gcctggggga	catagagaag	agcaaatcat	5040
ggaggaagat	aaaaaacatg	gtgcactggt	ctcccttcgt	catgtccttc	aagaagaagt	5100
accctggat	ccagctggca	ggacacgcag	ggagtttcaa	ggcagctgcc	aatggcagga	5160
tcctgaagaa	gcactgtgag	tcagagcagc	gctgcctgga	ccggctgatg	gtggatgtgc	5220
tgaggccctt	cgtacctgcc	taccatgggg	atgtggtgaa	ggacggggag	cgctacaacc	5280
agatggacga	cctgctggcc	gacttcgact	cgccctgtgt	gatggactgc	aagatgggaa	5340
tcagacagca	gcaggacttc	gcaggtgacc	acatggagaa	taatccaagt	ggtgtccact	5400
cagacctggc	caaaaaagca	ggggagtggtg	gggaggggct	gagcctcacc	ttcctgtggg	5460
catcccgccc	caccatccag	ctggcacccc	ctgtggacat	ctccccccag	cctctttcct	5520
ctcctgggca	gacctacctg	gaggaggagc	tcacgaaggc	ccggaagaag	cccagcctgc	5580
ggaaggacat	gtaccagaag	atgatcgagg	tggaccccga	ggccccccacc	gaggaggaaa	5640
aagcacagcg	ggctgtgacc	aagccacggt	acatgcagtg	gcgggagacc	atcagctcca	5700
cggccaccct	gggggttcagg	atcgagggaa	tcaagctaag	aggctctgcc	tgggggtgcac	5760
tgcccacagc	ccccggctct	cggccccctcc	tgcaccagc	gctgctccct	cagccccagg	5820
tcctgccagt	cctgtcgaag	gcagccacaa	aagaagacgg	caccgtgaac	cgggacttca	5880
agaagaccaa	aacgagggag	caggtcaccg	aggccttcag	agagttcact	aaaggaaaacc	5940
ataacatcct	gatcgccctat	cgggaccggc	tgaaggccat	tcgaaccact	ctagaagtctt	6000
ctcccttctt	caagtgccac	gaggtcattg	gcagctccct	cctcttcctc	cacgacaaga	6060
aggaacaggc	caaagtgtgg	atgatcgact	ttgggaaaac	cacgccccctg	cctgaggggcc	6120
agaccctgca	gcatgacgtc	ccctggcagg	aggggaaccg	ggaggatggc	tacctctcgg	6180
ggctcaataa	cctcgtcgc	atcctgaccg	aqatgtccca	qqatqcccca	ctcgcctga	6239

<210> 160

<211> 15

<212> PRT

<213> Homo sapiens

<400> 160

Met Asn Asn Ser Gly Ala Asp Leu His Leu Ser Thr Gly Thr Ile

1

5

10

15

<210> 161

<211> 37
 <212> PRT
 <213> Homo sapiens

<400> 161
 Met Asn Tyr Lys Leu Ser Glu Ile Ile Leu Ser Ser Lys Leu Ile Thr
 1 5 10 15
 Asp Val Ser Glu Ile Thr Gln Ile Met Phe Pro Phe Gln Phe Lys Ser
 20 25 30
 Arg Pro Phe Pro Leu
 35

<210> 162
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 162
 Met Gly Gln Glu Ala Gly Val Trp Gln Val Ser Phe Cys Phe Lys Lys
 1 5 10 15
 Gly Lys Gln Lys Glu Cys Gln Lys Phe Asp Phe Asn Phe Leu Ala Glu
 20 25 30
 Ala Phe Leu Pro Phe Ser Cys Pro Phe Phe Phe Pro Leu Pro Ser Phe
 35 40 45
 Pro Pro Ser Val Leu Ser Ser Phe Leu Phe Pro Leu Leu Ile Pro Phe
 50 55 60
 His Arg Thr Phe Cys Ala Gln Lys Met Thr Ala Ser Cys His Ala Pro
 65 70 75 80
 Leu Cys Glu Ser Ser Cys Ser Leu His Cys Gln Leu His Phe
 85 90

<210> 163
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 163
 Met Thr Leu Asn Glu His Ala Ala Phe Lys His Leu Phe Asn Glu Ala
 1 5 10 15

His Leu Ala Pro Pro Leu Ile His Leu Thr Leu Ser Gly His Ser Thr
20 25 30

Cys Phe Arg Glu His Arg Val Gly Gly Thr Val Pro Asp Thr Gly Asp
35 40 45

Asn Lys Glu Lys Gln
50

<210> 164

<211> 31

<212> PRT

<213> Homo sapiens

<400> 164

Met Leu Ile Cys Phe Tyr Pro Asp Thr Tyr Asn Gln Val Glu Leu Gly
1 5 10 15

Ile Leu Phe Ser Leu Arg Val Gly Glu His Arg Ile Thr Leu Tyr
20 25 30

<210> 165

<211> 36

<212> PRT

<213> Homo sapiens

<400> 165

Met Ile Thr Lys Ile Ile Asn Tyr Leu Gln Ile Ile Phe Thr Gly Ile
1 5 10 15

Val Arg Pro Ile Arg Lys Asn Tyr Lys Thr Leu Trp Asp Gly Tyr Lys
20 25 30

Arg Arg Phe Glu
35

<210> 166

<211> 19

<212> PRT

<213> Homo sapiens

<400> 166

Met Phe Leu Asn Cys Thr Met Asn Tyr Lys Asn Leu Leu Ala Arg Ser
1 5 10 15

Val Leu Phe

<210> 167

<211> 22

<212> PRT

<213> Homo sapiens

<400> 167

Met Lys Cys Phe Ser Phe Cys Leu Asn Thr Thr Ser Phe Thr Val Val
1 5 10 15

Lys Val Asn Tyr Phe Pro
20

<210> 168

<211> 68

<212> PRT

<213> Homo sapiens

<400> 168

Met Arg Leu Phe Ala Ile Val Gly Cys Trp Lys Phe Gly Tyr Ser Lys
1 5 10 15

Trp Tyr Ile Arg Leu Leu Phe Ala Cys Ala Pro Glu Val Phe Val Pro
20 25 30

Ala Ser Arg Ser Ala Val Ser Thr Pro Leu Ser Gln Pro Val Gly Ser
35 40 45

Thr Cys Glu Lys Leu Ser Ile Pro Gly Leu Ser Gly Arg Phe Leu Thr
50 55 60

Ser Leu Met Phe
65

<210> 169

<211> 105

<212> PRT

<213> Homo sapiens

<400> 169

Phe Leu Leu Arg Gln Asp Leu Thr Leu Ser Pro Lys Leu Glu Cys Ser
1 5 10 15

Gly Ala Ile Met Ala His Cys Ser Leu Gly Leu Pro Gly Ser Ser Asn
20 25 30

Pro Ser Thr Ser Ala Ser Arg Leu Ala Gly Thr Thr Gly Ala Tyr His
35 40 45

Gln Ala Trp Leu Ile Phe Leu Ile Lys Thr Gly Val Tyr Tyr Val Ala
50 55 60

Gln Ala Gly Leu Glu Leu Leu Asp Ser Ser Asn Ser Pro Thr Leu Ala
65 70 75 80

Ser Gln Ser Asp Arg Ile Thr Gly Met Ser His His Ala Gln Pro Gly
85 90 95

Ser Pro Leu Leu Thr Ile Thr Ile Pro
100 105

<210> 170
<211> 35
<212> PRT
<213> Homo sapiens

<400> 170
Met Leu Thr Ile Ser Glu Lys Ile Ile Ser Tyr Ile Tyr Ile Leu Val
1 5 10 15

Ser Lys Asp Ala Leu Lys Ala Leu Ser Ser Ile Val His Asn Ile Pro
20 25 30

Gly Leu Phe
35

<210> 171
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (74)

<400> 171
Met Ala Leu Gly His Ile Ser Gln Trp Ser Asp Pro Gly Ser Gln Gln
1 5 10 15

Ser Leu Leu Ser Ile Arg Asp Arg Thr Met Ala Gly Thr Leu Ser Lys
20 25 30

Val	Pro	His	Asp	Pro	Glu	Asp	Met	Cys	Glu	Phe	Cys	Ile	Ile	Phe	Pro
		35					40					45			

Ser Ile Ile Leu Arg Thr Val Arg Ala Lys Val Arg Thr Leu Thr His
50 55 60

Arg Phe Val Thr Arg Arg Asn Ser Leu Xaa Thr Glu Ser Phe
65 70 75

<210> 172

<211> 32

<212> PRT

<213> Homo sapiens

<400> 172

Met Arg Pro Gly Trp Pro Leu His Phe Leu Arg Asp Val Met Asn Ser
1 5 10 15

Arg Val Thr Lys Met Gln Thr Ala Ser Ser Arg His Arg Gly Met Val
20 25 30

<210> 173

<211> 46

<212> PRT

<213> Homo sapiens

<400> 173

Met Glu Lys Asp Leu Arg Val Gln Ser Ser Gly Pro Ile Leu Pro Arg
1 5 10 15

Arg Leu Gly Lys Phe Met Arg Val Ser Gly Arg Gly His Gly Val Leu
20 25 30

Ile Asp Leu Phe Ser Gln Leu Lys Ser Ser Phe Arg Leu Ser
35 40 45

<210> 174

<211> 39

<212> PRT

<213> Homo sapiens

<400> 174

Met Val Cys Arg Cys Ser Arg Lys Leu Cys Arg Trp Tyr Val Gly Asn
1 5 10 15

Trp Ile Trp Gly Asn Ala Ala Ala Cys His Ala Leu Ser Ile Gly Arg
20 25 30

Phe Ser Pro Leu Phe Pro Pro
35

<210> 175

<211> 38

<212> PRT

<213> Homo sapiens

<400> 175

Met Asn Thr Thr Leu Leu Cys Leu Cys Arg Ile Leu Pro Glu His Gly
1 5 10 15

Gly Lys Ser Thr Gly Ile Val Val Arg Lys Leu Gly Phe Trp Pro Glu
20 25 30

Phe Ala Pro Asp Tyr Gln
35

<210> 176

<211> 36

<212> PRT

<213> Homo sapiens

<400> 176

Met Leu Ala Lys Ile Ser Lys Thr Ile Lys Pro Gly Ser Ile Glu Leu
1 5 10 15

Pro Ser Ser Tyr His Lys Val Phe Pro His Phe Leu Leu Ile Val Asn
20 25 30

Phe Leu Lys Lys
35

<210> 177

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (26)..(32)

<400> 177

Met Phe Ser Ser Pro Ser Asp Cys Leu Leu Ile Pro His Leu Phe Phe
1 5 10 15

Arg Ser Leu Phe Phe Ile His Trp Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Ala Phe Lys Phe Leu Leu Phe Met Arg Gln Met Tyr Leu Arg Ser Ile
35 40 45

Asp Val Ser
50

<210> 178

<211> 15

<212> PRT

<213> Homo sapiens

<400> 178

Met Leu Ala Asn Thr Ile Val Ser Val Arg Lys Cys Arg Val Trp
1 5 10 15

<210> 179

<211> 57

<212> PRT

<213> Homo sapiens

<400> 179

Met Ser Ser Leu Leu Lys Ala Leu Thr Phe Trp Pro Gln Arg Met Ala
1 5 10 15

Leu Phe Val Pro Ile Arg Thr Arg Ile Leu Ile Phe Leu Leu Leu Gly
20 25 30

Pro Gly Asn Gln Arg Thr Thr Asn Thr Phe Ala Arg His Leu Gln Pro
35 40 45

Ser Arg Ser Gly Arg Pro Ser Leu Ser
50 55

<210> 180
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 180
 Met Arg Asn Ile Asn Ile Val Asp Tyr Ile Lys Ile Gly Ser Phe Cys
 1 5 10 15
 Ser Ser Thr Met Ser Glu Gly Glu Lys Ala Ser His Ile His His Pro
 20 25 30
 Tyr Ala Pro Lys Thr Gly Met Pro Arg Ala Glu Phe Arg Ala
 35 40 45

<210> 181
 <211> 47
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (26)..(47)

<400> 181
 Met Leu Asn Met Pro Leu Thr Ile Gln Ile Met Tyr Tyr Leu Met Leu
 1 5 10 15
 Leu Ile Ile Val Leu Phe Asn Leu Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

<210> 182
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 182
 Met Ser Thr Ile Arg Glu His Ile Ser Leu Tyr Ile Ile Val Thr Asn
 1 5 10 15
 Ile Leu Asn Tyr Lys Glu Lys Lys Lys Lys Asp Ala Lys Val Gln Arg

20 25 30
 Leu Asn Ser Gln His Pro Thr Asp Arg Glu Tyr Leu Gly
 35 40 45

 <210> 183
 <211> 57
 <212> PRT
 <213> Homo sapiens

 <400> 183
 Met Phe Cys Val Tyr Val Lys Pro Ser Pro Pro Val Leu Phe Ile Gly
 1 5 10 15
 Gly Gly Leu Ile Ala Val Met Ala Ser Ile Asn Gly Phe Leu Val Pro
 20 25 30
 Arg Pro Ser Val Val Leu Ser His Ser Asp Ser Arg Leu Asn Asn Met
 35 40 45
 Ala Lys Glu Glu Ser Arg Lys Leu Glu
 50 55

 <210> 184
 <211> 28
 <212> PRT
 <213> Homo sapiens

 <400> 184
 Met Leu Ile Phe Leu Phe Tyr Ser Ile Pro Ile Ser Arg Ala Gln Leu
 1 5 10 15
 Ile Gly Gln Pro Thr Thr Gly Ser Pro Cys Trp Val
 20 25

 <210> 185
 <211> 27
 <212> PRT
 <213> Homo sapiens

 <400> 185
 Met Pro Thr Arg Val Phe Ile Thr His Tyr Tyr Ser Ile Phe Gly Val
 1 5 10 15
 Pro Val Pro Cys Ser Leu Asn Asn Pro Gln Leu

20

25

<210> 186
<211> 25
<212> PRT
<213> Homo sapiens

<400> 186
Met Gln Arg Gly Lys Glu Leu Ile Val Ala Leu Phe Glu Asn Tyr Leu
1 5 10 15
Arg Pro Ser Leu Gly His Phe Asn Ser
20 25

<210> 187
<211> 49
<212> PRT
<213> Homo sapiens

<400> 187
Met Leu Ser Gln Phe Leu Lys Met Glu Trp Glu Val Glu Ile Ser Gln
1 5 10 15
Val Val Ala Gly Leu Gln His Phe His Ile Leu Gly Tyr Ile Ile Thr
20 25 30
Arg Cys Cys Leu Pro Ala Gly Ala Ile Thr Ala Ser Lys Ala Thr Cys
35 40 45

Phe

<210> 188
<211> 113
<212> PRT
<213> Homo sapiens

<400> 188
Met Ala Thr Lys Gln Ser Pro Leu Phe Tyr Leu Thr Gly Ser Ala Gly
1 5 10 15
Gly Ser Leu Val Leu Lys Pro Pro Pro Asn His Pro Tyr Arg Val Ser
20 25 30
Leu Arg Ala Lys Met Met Pro Gln His Pro Arg Arg Pro Leu Leu Pro

35 40 45
 His Gln Leu Gly Thr Lys Tyr Ser Leu Lys Cys Phe Ala Cys Gln Thr
 50 55 60
 Thr Arg Lys Gly Asn Ala Val Ser Thr Ser Ser Ile Cys Leu Cys Leu
 65 70 75 80
 Val Arg Arg Ala Leu Glu Glu Phe Arg Met Gln Val Lys Ser Met Glu
 85 90 95
 Gly Gly Ile Ser Phe Leu Ile Cys Lys Met Ser Leu Ile Lys Leu Ile
 100 105 110

Thr

<210> 189
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 189
 Met Pro Gln Thr Cys Thr Tyr Ser Lys Ser Asn Ile Leu Lys Ile Tyr
 1 5 10 15
 Gly Ile Asp Arg Asn Thr Phe Lys Ala Thr Ile His Thr Ala Arg
 20 25 30

<210> 190
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 190
 Met Gln Phe Gln Ala Leu Gly Arg Arg Val Pro Asp Cys Phe Leu Tyr
 1 5 10 15
 Thr Ala Ile Ile Pro Tyr Thr Ala Gly Ser Ser Phe Phe Asp Ile Leu
 20 25 30

Cys Asn Cys Arg Gly Leu
 35

<210> 191

<211> 78

<212> PRT

<213> Homo sapiens

<400> 191

Met Lys Ile Pro Ala Leu Ser Trp Val Trp Pro Ser Arg Asn Leu Leu

1 5 10 15

Ser Tyr Ile His Gly Val Leu Pro Phe Tyr Lys Leu Met Phe Cys Asn

20 25 30

His Pro Gly Tyr Phe Pro Arg Arg Lys Lys Lys Leu Val Glu Gln Gly

35 40 45

Glu Gly Cys Leu Lys Phe Gly Asn His Pro Trp Tyr Leu Asn Gln Gly

50 55 60

Lys Ala Leu Arg Ser Leu Val Leu Gly Asn Ile Leu Leu Tyr

65 70 75

<210> 192

<211> 34

<212> PRT

<213> Homo sapiens

<400> 192

Met Leu His Val Cys Ser Val Leu Ser Arg Gln Arg Leu Ala Pro Met

1 5 10 15

Lys Glu Ala Ser Glu Pro Ser Arg Arg Glu Val Phe Ser Leu Ser Asn

20 25 30

Ser Gln

<210> 193

<211> 325

<212> PRT

<213> Homo sapiens

<400> 193

Lys Val Ser Ile Leu Ser Thr Phe Leu Ala Pro Phe Lys His Leu Ser

1 5 10 15

Pro Gly Ile Thr Asn Thr Glu Asp Asp Asp Thr Leu Ser Thr Ser Ser

20 25 30

Ala Glu Val Lys Glu Asn Arg Asn Val Gly Asn Leu Ala Ala Arg Pro
 35 40 45
 Pro Pro Ser Gly Asp Arg Ala Arg Gly Gly Ala Pro Gly Ala Lys Arg
 50 55 60
 Lys Arg Pro Leu Glu Glu Gly Asn Gly Gly His Leu Cys Lys Leu Gln
 65 70 75 80
 Leu Val Trp Lys Lys Leu Ser Trp Ser Val Ala Pro Lys Asn Ala Leu
 85 90 95
 Val Gln Leu His Glu Leu Arg Pro Gly Leu Gln Tyr Arg Thr Val Ser
 100 105 110
 Gln Thr Gly Pro Val His Ala Pro Val Phe Ala Val Ala Val Glu Val
 115 120 125
 Asn Gly Leu Thr Phe Glu Gly Thr Gly Pro Thr Lys Lys Lys Ala Lys
 130 135 140
 Met Arg Ala Ala Glu Leu Ala Leu Arg Ser Phe Val Gln Phe Pro Asn
 145 150 155 160
 Ala Cys Gln Ala His Leu Ala Met Gly Gly Gly Pro Gly Pro Gly Thr
 165 170 175
 Asp Phe Thr Ser Asp Gln Ala Asp Phe Pro Asp Thr Leu Phe Gln Glu
 180 185 190
 Phe Glu Pro Pro Ala Pro Arg Pro Gly Leu Ala Gly Gly Arg Pro Gly
 195 200 205
 Asp Ala Ala Leu Leu Ser Ala Ala Tyr Gly Arg Arg Arg Leu Leu Cys
 210 215 220
 Arg Ala Leu Asp Leu Val Gly Pro Thr Pro Ala Thr Pro Ala Ala Pro
 225 230 235 240
 Gly Glu Arg Asn Pro Val Val Leu Leu Asn Arg Leu Arg Ala Gly Leu
 245 250 255
 Arg Tyr Val Cys Leu Ala Glu Pro Ala Glu Arg Arg Ala Arg Ser Phe
 260 265 270
 Val Met Ala Val Ser Val Asp Gly Arg Thr Phe Glu Gly Ser Gly Arg
 275 280 285

Ser Lys Lys Leu Ala Arg Gly Gln Ala Ala Gln Ala Ala Leu Gln Glu
 290 295 300

Leu Phe Asp Ile Gln Met Pro Gly His Ala Pro Gly Arg Ala Arg Arg
 305 310 315 320

Thr Pro Met Pro Gln
 325

<210> 194
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 194
 Met Ala Ser Phe Leu Leu Ser Thr Pro Ala Lys Arg Lys Pro His Pro
 1 5 10 15

Leu Pro Pro Ala His Pro Arg Ile His Thr Phe Arg Gln Pro Ser Gly
 20 25 30

Asn

<210> 195
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 195
 Met Ile Pro Thr Phe Val Leu Asp Ala Lys Tyr Ala Ala Leu Met Gly
 1 5 10 15

Gln Pro Trp Gly Leu Cys Ala Ile Cys Val His Ile Cys Leu Leu Leu
 20 25 30

Asp Ser Val Ser Leu Arg Ser Phe Ser Thr Ala Gln His Leu Glu Arg
 35 40 45

Ala Ser Lys Ser Thr Ser Ser Leu His His Leu Ile Leu Ile Asn Pro
 50 55 60

Ala Arg Glu Gly Cys Thr Gly Arg Thr Ala
 65 70

<210> 196
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 196
 Met Ala Asn Phe Cys Val Phe Ile Glu Thr Glu Gly Asn Ala Val Thr
 1 5 10 15
 Arg Arg Ala Leu Arg Lys Gln Ala Thr Ala Gly His Cys Ser Gly Lys
 20 25 30
 Pro Ala Phe Gln Pro Ala Pro Pro Gln Tyr Pro Arg Val His Ser Glu
 35 40 45
 Asp Arg Arg Leu Gln Gln Pro Gln Ala Ala Gly Arg Trp Gly Ala Pro
 50 55 60
 Asp Trp Ile Pro Pro Leu Gln Asp Thr Arg Lys Pro Ser Val Ser Ser
 65 70 75 80
 Arg Asp Ser Arg Ile His Glu Lys Glu Val Ile Leu Asp Ser Leu Cys
 85 90 95
 Ile

<210> 197
 <211> 645
 <212> PRT
 <213> Homo sapiens

<400> 197
 Ala Leu Arg Pro Pro Ser Gly Phe His Ile Arg Cys Leu Gly Asp Val
 1 5 10 15
 Ser Pro Ile Ser Met Ser Pro Ile Ser Gln Ser Gln Phe Ile Pro Leu
 20 25 30
 Gly Glu Ile Leu Cys Leu Ala Ile Ser Ala Met Asn Ser Ala Arg Lys
 35 40 45
 Pro Val Thr Gln Glu Ala Leu Met Glu His Leu Thr Thr Cys Phe Pro
 50 55 60
 Gly Val Pro Thr Pro Ser Gln Glu Ile Leu Arg His Thr Leu Asn Thr

65					70						75					80
Leu	Val	Arg	Glu	Arg	Lys	Ile	Tyr	Pro	Thr	Pro	Asp	Gly	Tyr	Phe	Ile	
				85					90					95		
Val	Thr	Pro	Gln	Thr	Tyr	Phe	Ile	Thr	Pro	Ser	Leu	Ile	Arg	Thr	Asn	
			100					105					110			
Ser	Lys	Trp	Tyr	His	Leu	Asp	Glu	Arg	Ile	Pro	Asp	Arg	Ser	Gln	Cys	
		115					120					125				
Thr	Ser	Pro	Gln	Pro	Gly	Thr	Ile	Thr	Pro	Ser	Ala	Ser	Gly	Cys	Val	
		130				135					140					
Arg	Glu	Arg	Thr	Leu	Pro	Arg	Asn	His	Cys	Asp	Ser	Cys	His	Cys	Cys	
145					150					155					160	
Arg	Glu	Asp	Val	His	Ser	Thr	His	Ala	Pro	Thr	Leu	Gln	Arg	Lys	Ser	
				165					170					175		
Ala	Lys	Asp	Cys	Lys	Asp	Pro	Tyr	Cys	Pro	Pro	Ser	Leu	Cys	Gln	Val	
			180					185					190			
Pro	Pro	Thr	Glu	Lys	Ser	Lys	Ser	Thr	Val	Asn	Phe	Ser	Tyr	Lys	Thr	
		195					200					205				
Glu	Thr	Leu	Ser	Lys	Pro	Lys	Asp	Ser	Glu	Lys	Gln	Ser	Lys	Lys	Phe	
		210				215					220					
Gly	Leu	Lys	Leu	Phe	Arg	Leu	Ser	Phe	Lys	Lys	Asp	Lys	Thr	Lys	Gln	
225					230					235					240	
Leu	Ala	Asn	Phe	Ser	Ala	Gln	Phe	Pro	Pro	Glu	Glu	Trp	Pro	Leu	Arg	
				245					250					255		
Asp	Glu	Asp	Thr	Pro	Ala	Thr	Ile	Pro	Arg	Glu	Val	Glu	Met	Glu	Ile	
			260					265					270			
Ile	Arg	Arg	Ile	Asn	Pro	Asp	Leu	Thr	Val	Glu	Asn	Val	Met	Arg	His	
		275					280					285				
Thr	Ala	Leu	Met	Lys	Lys	Leu	Glu	Glu	Glu	Lys	Ala	Gln	Arg	Ser	Lys	
		290				295					300					
Ala	Gly	Ser	Ser	Ala	His	His	Ser	Gly	Arg	Ser	Lys	Lys	Ser	Arg	Thr	
305					310				315						320	
His	Arg	Lys	Ser	His	Gly	Lys	Ser	Arg	Ser	His	Ser	Lys	Thr	Arg	Val	

	325		330		335
Ser Lys Gly Asp Pro Ser Asp Gly Ser His Leu Asp Ile Pro Ala Glu					
	340		345		350
Arg Glu Tyr Asp Phe Cys Asp Pro Leu Thr Arg Arg Ser Asn Lys Ala					
	355		360		365
Lys Glu Arg Ser Arg Ser Met Asp Asn Ser Lys Gly Pro Leu Gly Ala					
	370		375		380
Ser Ser Leu Gly Thr Pro Glu Asp Leu Ala Glu Gly Cys Ser Gln Asp					
385		390		395	400
Asp Gln Thr Pro Ser Gln Ser Tyr Ile Asp Asp Ser Thr Leu Arg Pro					
	405		410		415
Ala Gln Thr Val Ser Leu Gln Arg Ala His Ile Ser Ser Thr Ser Tyr					
	420		425		430
Lys Glu Val Cys Ile Pro Glu Ile Val Ser Gly Ser Lys Glu Pro Ser					
	435		440		445
Ser Ala Cys Ser Leu Leu Glu Pro Gly Lys Pro Pro Glu Ser Leu Pro					
	450		455		460
Ser Tyr Gly Glu Leu Asn Ser Cys Pro Thr Lys Thr Ala Thr Asp Asp					
465		470		475	480
Tyr Phe Gln Cys Asn Thr Ser Thr Tyr His Lys Ser Ser Leu Ser Leu					
	485		490		495
Leu Lys Ser His Pro Lys Thr Pro Ala Asp Thr Leu Pro Gly Arg Cys					
	500		505		510
Glu Lys Leu Glu Pro Ser Leu Gly Thr Ser Ala Ala Gln Ala Met Pro					
	515		520		525
Ala Ser Gln Arg Gln Gln Glu Ser Gly Gly Asn Gln Glu Ala Ser Phe					
	530		535		540
Asp Tyr Tyr Asn Val Ser Asp Asp Asp Asp Ser Glu Glu Gly Ala Asn					
545		550		555	560
Lys Asn Thr Glu Glu Glu Lys Asn Arg Glu Asp Val Gly Thr Met Gln					
	565		570		575
Trp Leu Leu Glu Arg Glu Lys Glu Arg Asp Leu Gln Arg Lys Phe Glu					

[illegible]

```
<210> 198
<211> 29
<212> PRT
<213> Homo sapiens
```

```

<400> 198
Met Leu Leu Tyr Ser Thr Arg Gly Lys Lys His Gly Leu Tyr Pro Gln
  1                      5                      10                      15
Gln Ser Leu Gly Asn Arg Gly Ile Tyr Leu Gln Asn Gly
          20                      25

```

```
<210> 199
<211> 32
<212> PRT
<213> Homo sapiens
```

```

<400> 199
Met Val Thr Lys Lys Asn Leu Lys Ser Asn Asn Leu Val Gly Ala His
  1             5             10             15
Leu Glu Tyr Asn Ser Met Ser Ser Cys Ile Tyr Leu Ser His Ile Leu
      20             25             30

```

```
<210> 200
<211> 38
<212> PRT
<213> Homo sapiens
```

<400> 200

Leu Ala Asn Phe Arg Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp
 1 5 10 15

Pro Val Ala Ser Gln Thr Pro Asp Leu Lys Ala Ser Ala Cys Leu Gly
 20 25 30

Leu Pro Lys Cys Trp Asp
 35

<210> 201

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (12)

<220>

<221> UNSURE

<222> (15)

<400> 201

Met Ser Phe Leu Phe Leu Asp Ile Ala Lys Trp Xaa Phe Phe Xaa Phe
 1 5 10 15

Leu Phe Cys Tyr Cys Phe Leu Ile Tyr Tyr Lys Met Leu Phe Phe Tyr
 20 25 30

Gly Gly Phe Lys His Pro Ile Pro Cys Pro Gly Phe Leu His His Trp
 35 40 45

Ile Leu Leu Ile Ile
 50

<210> 202

<211> 59

<212> PRT

<213> Homo sapiens

<400> 202

Met Gln Leu Trp Gly Glu Tyr Ser Pro Tyr Phe Cys Arg Asn Asn Asn
 1 5 10 15

Phe Glu Tyr Leu Cys Ala Thr Thr Val Ala Asn Thr Arg Leu Arg Cys
20 25 30

Leu Leu Leu Leu Ser Gln Pro Cys Glu Val Lys Thr Leu Ser Leu Leu
35 40 45

Thr Asp Glu Glu Thr Asp Ser Glu Asp Ile Lys
50 55

<210> 203

<211> 18

<212> PRT

<213> Homo sapiens

<400> 203

Met Arg Cys Thr Gln Gln Phe Ser Ile Leu Ala Val Phe Lys Cys Thr
1 5 10 15

Ile Gln

<210> 204

<211> 177

<212> PRT

<213> Homo sapiens

<400> 204

Met Asn Phe Leu Lys Leu Ile Ala Val Phe Ile Val Phe Ser His Ala
1 5 10 15

Ser Glu Ser Pro Gln Asp Ser Thr Pro Asn Gln Leu Tyr Ile Trp Gly
20 25 30

Arg Thr Lys Ala Leu Val Phe Phe Arg Ser Ser Thr Gly Asp Ser Asp
35 40 45

Ser Thr Ala Arg Ile Lys Lys Leu Ile Asn Gly Asn Ser Met Pro Val
50 55 60

Ala Glu Glu Leu Pro Trp Glu Met Ser His Thr Glu His Gln Ser Ser
65 70 75 80

Phe Pro Thr Pro Glu Ile Pro His Ser Leu Ala Pro Gly Thr Val Ala
85 90 95

Ile Ser Lys Pro Trp Phe Pro Ala Val Ser Gln Ile Ala Arg Val Gln

100 105 110
 Arg Val Asp Ile Asn Phe Cys Ser Trp Glu Asp Leu Ser Pro Ser Gly
 115 120 125
 Lys Ala Thr Gly Lys Ser Arg Thr His Cys Thr Val Thr Ala Val Ser
 130 135 140
 Ser Asn Ala Thr Thr His Ala Gly Ile Asn Asn Glu His Gly Trp Gly
 145 150 155 160
 Ser Leu Glu Leu Leu Asn Cys Lys Ala His Lys Cys Leu Asn Phe Phe
 165 170 175
 His

<210> 205
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 205
 Met Thr Ser Met Ala Glu Pro Gly Leu Ala Leu Tyr Leu Cys Gly His
 1 5 10 15
 Thr Val Val Trp Ser Ser Ser Ser Leu Met Val Thr Phe Val Arg Ile
 20 25 30
 Leu Ile Ser Val Phe Phe Leu Pro Gln Phe Ser Ser Ser Arg Leu Pro
 35 40 45
 His Pro Cys Ser Leu Phe Met Pro Ala Trp Val Val Ala Leu Asp Glu
 50 55 60
 Thr Ala Val Thr Val Gln Cys Val Leu Leu Phe Pro Val Ala Phe Pro
 65 70 75 80
 Leu Gly Glu Arg Ser Ser His Glu Gln Lys Phe Ile Ser Thr Arg Trp
 85 90 95
 Thr Leu Ala Ile Cys Glu Thr Ala Gly Asn Gln Gly Leu Leu Ile Ala
 100 105 110
 Thr Val Pro Gly Ala Lys Glu
 115

<210> 206
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 206
 Met Leu Ile Ser Lys Ile Ile Ile Gly Ile Lys Thr Gln Arg Tyr Leu
 1 5 10 15
 Ile Glu Lys Ser His Arg Ser Pro Arg Ile Tyr Ile Tyr Leu Gly Leu
 20 25 30
 Ala

<210> 207
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 207
 Leu Pro Cys Ser Asn Phe Phe Phe Phe Ser Phe Ser Leu Phe Leu Val
 1 5 10 15
 Phe Ile Phe Ser Ala Ile Ser Arg Ile Phe Leu Leu Leu Ala Met Ser
 20 25 30
 Gln Ser Ile Met Ala Leu Ser Pro Arg Leu Glu Cys Asn Gly Ala Val
 35 40 45
 Ser Gly His Cys Asn Pro Cys Leu Pro Gly Ser Ser Asp Ser Pro Pro
 50 55 60
 Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Thr Cys His His Ala Arg
 65 70 75 80
 Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Gln
 85 90 95
 Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Pro Thr Ser Ala Ser
 100 105 110
 Gln Ser Ala Gly Ile Thr Gly Val Ser His Arg Ala Arg Pro
 115 120 125

<210> 208
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 208
 Met Val Tyr Lys Leu Glu Trp His Ile Ala Phe Leu Arg Ile Leu Arg
 1 5 10 15
 Gln Arg Pro Gly Phe Gly Ala Lys Ile Lys Gly Trp Met Ser His Leu
 20 25 30
 Pro Trp Tyr Gly Asn Ala Ser Val Leu Thr Ser Ala Gln Ser Asn Leu
 35 40 45
 Lys Leu Ile Ser Pro Ser Arg Phe Phe Leu Leu Phe Leu Ala Arg Glu
 50 55 60
 Lys Ile Thr Ser Ala Phe Phe Phe Arg Arg Val Lys Lys Lys Glu His
 65 70 75 80
 His Ser Ile Ser Gln Asn Cys Ile
 85

<210> 209
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 209
 Met Ser Leu His Cys Val Thr Asn Thr Asp Leu Val Ser Lys Trp Cys
 1 5 10 15
 Arg Arg Thr Gln Ala Thr Thr Arg Asn Glu Pro Ser Leu Cys Asp Gln
 20 25 30
 Gly Gly Pro Gly Arg Gln Thr Pro Ala His Glu Gly Arg Thr Val Val
 35 40 45
 Ala Met Thr Ser
 50

<210> 210
 <211> 63
 <212> PRT
 <213> Homo sapiens

```
<400> 210
Met Arg Leu Pro Asp Asp Ser Cys Pro Ser Cys Ser Gly Leu Pro Ala
   1                               5               10                   15

Glu Lys Ser Cys Thr His Arg Ala Leu Leu Gly Phe Leu Thr Cys Gly
      20                             25                       30

Ile His Asp Pro Val Thr Pro Leu Ser Ser Val Met Val His Tyr Asn
     35                           40                          45

Asn Arg Ser Pro Asp His Gly Asn Tyr Phe Ser Ser Ser Thr Leu
    50                            55                        60
```

```
<210> 211
<211> 104
<212> PRT
<213> Homo sapiens
```

```

<400> 211
Met Asp Phe Glu Phe Ile Phe Phe Pro Leu Lys Lys Gly Asn Pro Leu
  1             5             10             15

Ile Ala Lys Ser His Leu Gln Ile Val Lys Gln Thr Ser Gln Ile Thr
      20             25             30

Lys Cys Phe Leu Cys Lys Gln Lys Ile Cys Phe Ala Gly Lys Gly Ile
      35             40             45

Leu Leu Leu Asn Thr Gly Thr Val Ser Val Ile Leu Arg Met Gly Thr
      50             55             60

Val Pro Tyr Asn Leu Phe Leu Lys Tyr Leu Leu Leu Leu Gly Leu Ser
  65             70             75             80

Gln Ala Pro Ile Phe Ser Val Val Met Lys Lys Asn Tyr Gln Ala Thr
      85             90             95

Ser Trp Val Phe Phe Ser Leu Phe
      100

```

```
<210> 212
<211> 57
<212> PRT
<213> Homo sapiens
```

<400> 212

Met Ile Glu Leu Leu Ser Pro Tyr Gln Leu Arg Glu Leu Phe Cys Ser
 1 5 10 15

Leu Thr His Val Gly Arg Thr Val Arg Trp Ser Glu Gln Trp Asn Leu
 20 25 30

Leu Val Ala Gln Val Leu Glu Val Tyr Ser Asn Gly Gly Arg Thr Gln
 35 40 45

Leu Gly Ile Trp Phe Leu Leu Ser Lys
 50 55

<210> 213

<211> 31

<212> PRT

<213> Homo sapiens

<400> 213

Met Leu Glu Phe Gly Lys Cys Lys Phe Cys Phe Ala Asp Glu Ile Phe
 1 5 10 15

Leu Leu Asn Phe Asn Thr Leu Lys Gly Ile Pro Val Phe Asn Tyr
 20 25 30

<210> 214

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (29)..(32)

<220>

<221> UNSURE

<222> (36)

<400> 214

Met Leu Ile Glu Val Phe Lys Gly Ile Tyr Lys Leu Asn Thr Leu His
 1 5 10 15

Asn Tyr Gln Leu Asn Lys Cys Phe Tyr His Met Gln Xaa Xaa Xaa Xaa
 20 25 30

Phe Phe Leu Xaa Arg

35

<210> 215

<211> 131

<212> PRT

<213> Homo sapiens

<400> 215

Met Gly Gln Lys Ile Ser Arg Gln Pro Tyr Ser Gly Ser Trp Ser Leu
1 5 10 15

Phe Ser Cys Ser Asp Pro Gln Lys Ala Ser Lys Ser Leu Asn Leu Glu

Thr Arg Gln Phe Phe Leu Ile Ser Cys Leu Lys Ala Val Gln Ser Ser
35 40 45

Val Asn Lys Pro Leu His Ala Gly Leu Ile Asn Ala Gly Pro Leu Arg
50 55 60

Ala Met Thr Gln Glu His Gly Leu Gly Ser Thr Leu Lys Ser Arg Asn
65 70 75 80

His Ser Thr Asp Asn Gly Asn Phe Val Gly Gly Asn Arg Leu Leu Glu
85 90 95

Leu Asn Ala Phe Val Arg Phe Leu Asp Leu Gln Ile Ser Leu Cys Gly
100 105 110

Pro Ala Leu Gly Gly Lys Ala Gly Ile His Asn Asn Leu Ile Asn Leu
115 120 125

Thr Gln Thr
130

<210> 216

<211> 57

<212> PRT

<213> Homo sapiens

<400> 216

Met Glu Phe Arg Cys Gln Leu Ile Pro Arg Leu Ile Leu Ser Tyr Ile
1 5 10 15

Lys Val Asn Asp Ile Leu His Glu Ile Met Leu Val Glu Pro Thr Arg
20 25 30

Leu Leu Ala Met Leu Pro Ser Leu Ser Ser Leu Asp Phe Leu Phe Lys
35 40 45

Ser Leu Tyr Arg Val Thr Val Glu His
50 55

<210> 217

<211> 67

<212> PRT

<213> Homo sapiens

<400> 217

Met Cys Glu Leu Pro Leu Leu Leu Cys Asn Ser Ile Leu Phe Met Ile
1 5 10 15

Cys Asp Val Ile Arg Lys Phe Leu Leu Met Cys Gln Asn Lys Phe Asn
20 25 30

Phe Pro Leu Arg Gln Phe Ile Thr Leu Phe Lys Trp Asn Ile Lys Glu
35 40 45

Glu Pro Pro Ile Cys Lys Ile Leu Thr Phe Lys Phe Met Leu Ile Phe
50 55 60

Leu Asn Tyr
65

<210> 218

<211> 69

<212> PRT

<213> Homo sapiens

<400> 218

Met Ser Cys Leu Ser Tyr Gly Phe Lys Tyr Leu Gln Cys Ile Ala Lys
1 5 10 15

Tyr Cys Ser Cys Thr Leu Gln Leu Arg Asn Thr Val Leu Gly Phe Gln
20 25 30

Gln Lys Tyr Leu Arg Ile Ser His Ser Ser Leu Lys Lys Asp Ala Lys
35 40 45

Asp Val Thr Gly Ile Ile Ile Val Ala Val Ser Cys Arg Ile Lys Asp
50 55 60

Arg Thr Arg Tyr Gly
65

<210> 219
<211> 29
<212> PRT
<213> Homo sapiens

<400> 219
Met Leu Trp Ser Leu Tyr Ile Ser Phe Lys Val Val Ala Asn Lys Arg
1 5 10 15

Met Pro Ile Gln Gly Ile Tyr Trp His Phe His Gly Gly
20 25

<210> 220
<211> 26
<212> PRT
<213> Homo sapiens

<400> 220
Met Asn Phe Asp Cys Ala Ser Ala Ile Leu Asp Ile Phe Val Met Ile
1 5 10 15

Gly Asn Arg Thr Ile Lys Cys Leu Ala Leu
20 25

<210> 221
<211> 41
<212> PRT
<213> Homo sapiens

<400> 221
Met Leu Phe Leu Asn Trp Ala Pro Ser Ser Asp Phe Ala Asn Leu Lys
1 5 10 15

Ser Ile Thr Cys Leu Cys Leu Ser Lys Asn Pro Ser Ile Pro Ser Ser
20 25 30

Leu Ile Ala Pro Cys Tyr Ser Pro Val
35 40

<210> 222
<211> 45

<212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (31)..(39)

<220>
 <221> UNSURE
 <222> (42)..(43)

<400> 222
 Met Thr Ile Trp Gln Arg Tyr Phe Ser Tyr Asn Glu Lys Tyr Leu Cys
 1 5 10 15
 Pro Ile Ser Leu Lys Ser Asp Val Glu Lys Leu Tyr Ile Tyr Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Leu Xaa Xaa Leu Leu
 35 40 45

<210> 223
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 223
 Met Phe Gln Ser Val Arg Glu Met Ser Leu Ser Gly Ser Ile Pro Ala
 1 5 10 15
 Asn Asn Glu Glu Gly Met Arg Gln Ala Gln Trp His Ser Arg Leu
 20 25 30

<210> 224
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 224
 Phe Phe Phe Phe Phe Leu Arg Gln Ser Phe Thr Leu Ser Gln Ala Gly
 1 5 10 15
 Val Ala Trp His Asp Leu Gly Ser Leu His Pro Pro Leu Pro Gly Ser
 20 25 30
 Ser Asp Ser Arg Ala Ser Ala Ser Gln Ser Ala Arg Ile Thr Gly Val

$$-\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} \frac{e^{-t^2}}{t} dt = 0$$

```

35
40
45
Phe Ala Ser Gln Leu Gly Ser Leu Ile
50 55

<210> 228
<211> 101
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (32) .. (73)

<400> 228
Met Phe His Val Phe Ser Cys Ser Arg Ser Asp Leu Ala Thr Pro Gly
1 5 10 15
Asp Thr Phe Gly Tyr Thr Asn Arg Val Tyr Leu Gly Gln Arg Trp Xaa
20 25 30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75 80
Ser Pro Leu Ser Pro Thr Met Leu Val Leu Leu Thr Trp Leu Leu Ile
85 90 95
Lys Gln Cys Gln Val
100

```

```

<210> 229
<211> 88
<212> PRT
<213> Homo sapiens

<400> 229
Met  Leu  His  Ser  Pro  Gly  Leu  Thr  Arg  Gly  Trp  Pro  Gln  Lys  Arg  Val
   1              5              10              15
Gly  Glu  Ala  Gly  Gln  Gln  Gly  Leu  Ala  Glu  Ile  Ile  Cys  Arg  Ala  Gln

```


<211> 25
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Arg Tyr Ile His Val Glu Phe Cys Ser Cys Gly Leu Met Ile Phe
 1 5 10 15
 Thr Leu Tyr Ser Ile Thr Phe His Gly
 20 25

<210> 233
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 233
 Met Leu Pro Thr Pro Val Pro Thr Ile Glu Ala Leu Leu Phe Met Leu
 1 5 10 15
 Lys Cys Gln Val Leu Thr Val His Gly Ser Met Glu Thr Phe Leu Leu
 20 25 30
 Phe Ser Val Val Leu Gly Ala Ser Leu Leu Val Asn Leu Arg Lys Ile
 35 40 45
 Gly Asp Ser Val Asn Leu Glu
 50 55

>
 <210> 234
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 234
 Met Gly Arg Ile Arg Pro Asp His Thr Leu Leu Phe Gln Arg Gly Pro
 1 5 10 15
 Val Pro Ala Pro Leu Thr Ser Gly Leu His Tyr Tyr Thr Thr Leu Glu
 20 25 30
 Glu Leu Trp Lys Ser Phe Asp Leu Cys Glu Asp Tyr Phe Lys Pro Pro
 35 40 45
 Phe Gly Pro Tyr Pro Glu Lys Ser Gly Lys Asp Ser Leu Val Ser Met
 50 55 60

Lys Cys Ser Leu Phe Arg Phe Cys Pro Trp Ser Lys Glu Leu Pro Phe
 65 70 75 80

Gln Pro Pro Glu Gly Ser Ile Ser Ser His Leu Gly Ser Gly Ala Ser
 85 90 95

Asp Ser Glu Thr Glu Glu Thr Arg Lys Ala Leu Pro Ile Gln Ser Phe
 100 105 110

Ser His Glu Lys Glu Ser His Gln His Arg Gln His Ser Val Pro Val
 115 120 125

Ile Ser Arg Pro Gly Ser Asn Val Lys Pro Thr Leu Pro Pro Ile Pro
 130 135 140

Gln Gly Arg Arg
 145

<210> 235

<211> 940

<212> PRT

<213> Homo sapiens

<400> 235

Glu Tyr Thr Ser Phe Ser Ala Leu His Asn Thr Tyr Ser Lys Ile Asp
 1 5 10 15

His Ile Val Gly Ser Lys Ala Leu Leu Ser Lys Cys Lys Arg Thr Glu
 20 25 30

Met Ile Thr Asn Cys Leu Ser Asp His Ser Ala Ile Lys Leu Glu Leu
 35 40 45

Arg Ile Lys Lys Leu Thr Gln Asn Cys Ser Thr Thr Trp Lys Leu Asn
 50 55 60

Asn Leu Leu Leu Asn Asp Tyr Cys Val His Asn Lys Met Lys Ala Glu
 65 70 75 80

Ile Lys Met Phe Phe Glu Thr Asn Glu Asn Lys Asp Thr Thr Tyr Gln
 85 90 95

Asn Leu Trp Asp Thr Phe Lys Ala Val Cys Arg Gly Asn Phe Ile Ala
 100 105 110

Leu Asn Val His Lys Arg Lys Gln Glu Arg Ser Lys Ile Asp Thr Leu

115					120					125						
Ile	Ser	Gln	Leu	Lys	Glu	Leu	Glu	Lys	Gln	Glu	Gln	Thr	His	Ser	Lys	
130					135					140						
Ala	Ser	Arg	Arg	Gln	Glu	Ile	Thr	Lys	Ile	Arg	Ala	Glu	Val	Lys	Glu	
145					150					155					160	
Ile	Glu	Thr	Gln	Lys	Thr	Phe	Lys	Arg	Ile	Asn	Glu	Ser	Arg	Asn	Trp	
165					170					175						
Phe	Phe	Glu	Arg	Ile	Ser	Lys	Ile	Asp	Arg	Pro	Leu	Ala	Arg	Leu	Ile	
180					185					190						
Lys	Lys	Lys	Arg	Glu	Lys	Asn	Gln	Ile	Asp	Ala	Ile	Asn	Thr	His	Asp	
195					200					205						
Lys	Gly	Asp	Ile	Thr	Thr	Asp	Pro	Thr	Glu	Ile	Gln	Thr	Thr	Ile	Arg	
210					215					220						
Glu	Tyr	Tyr	Lys	His	Phe	Tyr	Ala	Asn	Lys	Leu	Glu	Asn	Leu	Glu	Glu	
225					230					235					240	
Met	Asp	Lys	Phe	Leu	Asp	Thr	Tyr	Thr	Leu	Pro	Arg	Leu	Asn	Gln	Glu	
245					250					255						
Glu	Ala	Glu	Ser	Leu	Asn	Arg	Pro	Ile	Thr	Asp	Ser	Glu	Ile	Ala	Ala	
260					265					270						
Ile	Ile	Asn	Ser	Leu	Pro	Thr	Lys	Lys	Ser	Pro	Gly	Pro	Asp	Gly	Phe	
275					280					285						
Thr	Pro	Lys	Phe	Tyr	Gln	Arg	Tyr	Lys	Glu	Glu	Leu	Val	Pro	Phe	Leu	
290					295					300						
Leu	Lys	Leu	Phe	Gln	Ser	Ile	Thr	Lys	Glu	Gly	Ile	Leu	Pro	Asn	Ser	
305					310					315					320	
Phe	Tyr	Glu	Ala	Asn	Ile	Ile	Leu	Ile	Leu	Lys	Pro	Gly	Arg	Asp	Thr	
325					330					335						
Thr	Lys	Lys	Arg	Glu	Phe	Arg	Pro	Ile	Ser	Met	Met	Ile	Ile	Asp	Ala	
340					345					350						
Lys	Ile	Leu	Ser	Lys	Ile	Leu	Ala	Asn	Gln	Ile	Gln	Gln	His	Leu	Ile	
355					360					365						
Lys	Leu	Ile	His	His	Asp	Gln	Val	Gly	Phe	Ile	Pro	Gly	Met	Lys	Gly	

370				375				380							
Trp	Phe	Asn	Ile	Arg	Lys	Ser	Ile	Lys	Val	Ile	His	His	Ile	Asn	Arg
385				390				395				400			
Thr	Lys	Asp	Lys	Asn	His	Met	Ile	Ile	Ser	Ile	His	Ala	Glu	Lys	Ala
405				410				415							
Phe	Asp	Lys	Ile	Gln	Gln	Pro	Phe	Met	Leu	Lys	Thr	Val	Asn	Lys	Leu
420				425				430							
Val	Ile	Asp	Gly	Thr	Tyr	Leu	Lys	Ile	Ile	Arg	Ala	Ile	Tyr	Asp	Lys
435				440				445							
Pro	Thr	Ala	Asn	Ile	Ile	Leu	Asn	Gly	Gln	Lys	Leu	Glu	Ala	Phe	Pro
450				455				460							
Leu	Arg	Thr	Gly	Ile	Arg	Gln	Gly	Cys	Pro	Leu	Ser	Pro	Leu	Leu	Phe
465				470				475				480			
Asn	Ile	Val	Leu	Glu	Val	Leu	Ala	Arg	Ala	Ile	Arg	Gln	Glu	Lys	Glu
485				490				495							
Ile	Lys	Gly	Ile	Gln	Leu	Gly	Lys	Glu	Lys	Val	Lys	Leu	Ser	Leu	Phe
500				505				510							
Ala	Asp	Asp	Met	Ile	Leu	Tyr	Leu	Glu	Asn	Pro	Ile	Val	Ser	Ala	Gln
515				520				525							
Asn	Leu	Leu	Lys	Leu	Met	Ser	Ser	Phe	Ser	Lys	Val	Ser	Gly	Tyr	Lys
530				535				540							
Ile	Asn	Val	Gln	Lys	Ser	Gln	Ala	Phe	Leu	Tyr	Thr	Asn	Asn	Arg	Gln
545				550				555				560			
Thr	Glu	Ser	Gln	Met	Ser	Glu	Leu	Pro	Phe	Ala	Ile	Ala	Ser	Lys	Arg
565				570				575							
Ile	Lys	Tyr	Leu	Gly	Ile	Gln	Leu	Thr	Arg	Asp	Val	Lys	Asp	Leu	Phe
580				585				590							
Lys	Glu	Asn	Tyr	Lys	Pro	Leu	Leu	Asn	Lys	Ile	Lys	Glu	Asp	Thr	Asn
595				600				605							
Lys	Trp	Lys	Asn	Ile	Pro	Cys	Ser	Trp	Ile	Gly	Arg	Ile	Asn	Ile	Val
610				615				620							
Lys	Met	Ala	Ile	Met	Pro	Lys	Val	Ile	Tyr	Arg	Phe	Asn	Ala	Ile	Pro

625		630		635		640
Ile Lys Leu Pro Met Thr Phe Phe Thr Glu Leu Glu Lys Thr Thr Leu						
		645		650		655
Lys Phe Ile Trp Asn Gln Lys Arg Ala Arg Ile Ala Lys Thr Ile Leu						
		660		665		670
Ser Gln Lys Asn Lys Ala Gly Gly Ile Thr Leu Pro Asp Phe Lys Leu						
		675		680		685
Tyr Tyr Lys Ala Thr Val Thr Lys Thr Ala Trp Tyr Trp Tyr Gln Asn						
		690		695		700
Arg Asp Ile Asp Gln Trp Asn Arg Ile Glu Pro Leu Glu Leu Ile Pro						
		705		710		715
His Ile Tyr Asn His Leu Ile Phe Asp Lys Pro Asp Lys Asn Lys Leu						
		725		730		735
Trp Gly Lys Asp Ser Leu Phe Asn Lys Trp Cys Trp Glu Asn Trp Leu						
		740		745		750
Ala Ile Cys Arg Lys Leu Lys Leu Asn Leu Phe Leu Thr Pro Tyr Thr						
		755		760		765
Lys Ile Asn Ser Arg Trp Ile Lys Asp Leu Asn Val Arg Pro Lys Thr						
		770		775		780
Ile Lys Ile Leu Glu Lys Asn Leu Gly Asn Thr Ile Gln Asp Ile Gly						
		785		790		800
Val Gly Lys Asp Phe Met Thr Lys Thr Pro Lys Ala Met Ala Thr Lys						
		805		810		815
Ala Lys Ile Asp Lys Trp Asp Ile Ile Lys Leu Lys Ser Phe Cys Thr						
		820		825		830
Ala Lys Glu Thr Thr Ile Ile Val Asn Arg Gln Pro Thr Glu Trp Glu						
		835		840		845
Lys Ile Phe Lys Ile Tyr Pro Ser Asp Lys Gly Leu Ile Ser Arg Ile						
		850		855		860
Tyr Lys Glu Leu Lys Gln Ile Tyr Lys Lys Lys Ser Asn Asn Pro Ile						
		865		870		875
Lys Asn Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile						

				885					890					895					
Tyr	Ala	Val	Asn	Arg	His	Met	Lys	Thr	Cys	Ser	Ser	Leu	Leu	Ala	Ile				
			900					905					910						
Arg	Glu	Met	Gln	Ile	Lys	Thr	Thr	Met	Arg	Tyr	His	Phe	Thr	Pro	Val				
		915					920					925							
Arg	Met	Ala	Ser	Ile	Lys	Lys	Ser	Gly	Asn	Asn	Arg								
	930					935					940								

```
<210> 236
<211> 58
<212> PRT
<213> Homo sapiens
```

<400> 236
Met Ala Ile Glu Val Cys Trp Pro Leu Pro Leu Asp Gly Leu Leu Leu
1 5 10 15

Leu Ala Leu Glu Phe Leu Arg Pro Leu Phe Ile Ile Pro Gln Ser Phe
20 25 30

Phe Leu Leu Pro Ala Met Leu Cys Leu Phe Phe Ala Leu Leu Ser Pro
35 40 45

Arg Thr Thr Phe Phe His Phe His Ser Gly
50 55

```
<210> 237
<211> 34
<212> PRT
<213> Homo sapiens
```

<220>
<221> UNSURE
<222> (28)

```
<400> 237
Met Pro Leu His Leu Gly Tyr Lys Val Ser Pro Pro Pro Gln Ser His
      1               5               10              15
```

Gly Leu Ala Asn Tyr Leu Ser Val Phe Asp Cys Xaa Val Val Ser Thr
20 * 25 30

Gly Glu

<210> 238
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 238
 Met Arg Lys Val Cys Val Pro Ala Phe Met Thr Ile Glu Ser Arg Gln
 1 5 10 15
 Leu Leu Ser Gly Val Ser Ala Cys Phe Gln Gln
 20 25

<210> 239
 <211> 26
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (22)

<400> 239
 Met Thr Ser Ile Thr Val Leu Phe Ser Lys Lys Arg Leu Ser Leu Met
 1 5 10 15
 Ala Ser Arg Cys Val Xaa Leu Met Arg Tyr
 20 25

<210> 240
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 240
 Met Lys Ser Gln Leu Gln Ser Leu His Pro Phe Phe Ser Lys Leu Ala
 1 5 10 15
 Leu Leu Val Ser Val Leu Phe Tyr Ile Ile Trp Leu His Leu Thr Val
 20 25 30
 Phe Lys Lys Ser Ser Val Leu Gln Lys Asn Phe Lys Leu
 35 40 45

<210> 241
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 241
 Met Ile Gly Ile Thr Trp Cys Phe Glu Leu Ile His Pro Thr Leu Glu
 1 5 10 15
 Leu Thr Ala Thr Val Pro Asp Phe His Arg Tyr Ala Ser Phe His Ser
 20 25 30
 Gly Ser Leu Pro Glu Val Leu His Ser Gly Glu His Ala Gln Val Ser
 35 40 45
 Pro Ala Leu Gln Asn His Pro Glu Cys Gln Arg Leu Gln His Lys Gly
 50 55 60
 Lys
 65

<210> 242
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 242
 Ile Phe Thr Ala Met Pro Pro Phe Thr Leu Gly Val Phe Gln Arg Ser
 1 5 10 15
 Cys Thr Arg Glu Ser Met Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr
 20 25 30
 Gln Asn Ala Lys Asp Phe Asn Thr Arg Val
 35 40

<210> 243
 <211> 40
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (2)

<400> 243

Met Xaa Leu Val Leu Leu Thr Arg Leu Ile Arg Arg Ser Leu Tyr Thr
1 5 10 15

Lys Arg Asn Leu Leu Ser His Ser His Asn Lys Thr Ser His Gln Thr
20 25 30

Asn Asp Thr Lys Ser Glu Asn His
35 40

<210> 244

<211> 56

<212> PRT

<213> Homo sapiens

<400> 244

Met Phe Pro Glu Leu Ala Ser Leu Tyr Pro Gly Lys Gly Thr Ser Phe
1 5 10 15

Ser Trp Ala Val Pro Pro Pro Gln Lys Pro Glu Ser Gln Pro Cys Arg
20 25 30

Val Pro Ser Ser Ser Phe Gln Ile Gln Ile Thr Pro Thr Ser Ser Leu
35 40 45

Gly Ser Pro Ser Leu Arg Thr Gln
50 55

<210> 245

<211> 26

<212> PRT

<213> Homo sapiens

<400> 245

Met Lys Lys Pro Glu Ala Glu Ala Ala Leu Thr Leu Arg Asn Pro Val
1 5 10 15

Ser Gln Arg Asp Leu Ala Ile Leu Ala Ser
20 25

<210> 246

<211> 43

<212> PRT

<213> Homo sapiens

<400> 246

Met Pro Ile Tyr Pro Cys Pro Cys Arg Val Gly Arg Lys Asn Leu Met
1 5 10 15

Leu Ala Asn Ser Pro His Phe Asn Ser Thr Leu Gln Thr Leu Ser Lys
20 25 30

Cys Leu Leu Phe Val Arg Gln Tyr Ala Ser His
35 40

<210> 247

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (12)..(33)

<400> 247

Met Lys Gln Trp Asp Ala Val Arg Lys Arg Lys Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Cys Arg Gly Lys Val Asn Lys Asn Cys Ile Ile Leu Gly Val Phe
35 40 45

Cys

<210> 248

<211> 24

<212> PRT

<213> Homo sapiens

<400> 248

Met Pro Tyr Asp Ser Thr Tyr Ile Lys Ser Lys His Gln Ala Val Leu
1 5 10 15

Ser Met Ile Val Lys Leu Val Gly
20

<210> 249

<211> 30
 <212> PRT
 <213> Homo sapiens

<400> 249
 Met His Ile Ser Phe Gly Ile Gln Ile Ile Val Asn Asp Gly Glu Leu
 1 5 10 15
 Thr Ser Asn Ile Ser Ser Tyr Thr Thr Asn Val Ile Lys Pro
 20 25 30

<210> 250
 <211> 192
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (136)

<400> 250
 Met Pro Ser Val Arg Ala His Pro Asn Pro Arg Ala Glu Gly His Glu
 1 5 10 15
 Gly Ala Lys Ser Leu Arg Asn Ala Ile Leu Arg Leu Val Arg Asp Met
 20 25 30
 Glu Ile Arg Thr Gln Gly Gly Pro Gly Leu Gly Asn Asp Trp Glu Thr
 35 40 45
 Cys Leu Gly Ser Gln Asp Leu Gly Val Leu Thr Pro Ser Pro His Pro
 50 55 60
 Ala Val Pro Ser Val Pro Ser Pro Ser Leu Ser Lys Pro Leu Gly Ile
 65 70 75 80
 Glu Trp Pro Leu Leu Phe Trp Cys Pro Gly Val Ile Val Pro Lys Leu
 85 90 95
 Leu Phe Pro Val Pro Ser Pro Gln Arg Leu Val Arg Val Gly Met Arg
 100 105 110
 Asp Gly Glu Gly Leu Gly Leu Trp Glu Gln Val Gly Gly Leu Ile Cys
 115 120 125
 Gly Leu Ser Asp Ser Gln Leu Xaa Pro Arg Trp Gly Met Ser Pro Ser
 130 135 140

Leu Leu Ser Val Trp Val Arg Lys Thr Gly Cys Asp Pro Glu Glu Gly
145 150 155 160

Lys Ile Glu Lys Glu Gly Lys Asp Val Gly Glu Gly Gly Glu Arg Gln
165 170 175

Asp Arg Arg Lys Glu Val Glu Glu Glu Val Val Gly Ile Gly Met Arg
180 185 190

<210> 251
<211> 45
<212> PRT
<213> Homo sapiens

<400> 251
Met Gln Phe Cys Lys Ile Lys Cys Leu Ser Arg His Ala Tyr Asn Pro
1 5 10 15

Ala Ile Ala Cys Leu Gly Ala Tyr Leu Thr Glu Met Asn Ile Tyr Asn
20 25 30

Tyr Ile Ile Ile Cys Thr Pro Asn Ser Ser Gln Leu Tyr
35 40 45

<210> 252
<211> 169
<212> PRT
<213> Homo sapiens

<400> 252
Met Ala Pro Ser Glu Asp Pro Arg Asp Trp Arg Ala Asn Leu Lys Gly
1 5 10 15

Thr Ile Arg Glu Thr Gly Leu Glu Thr Ser Ser Gly Gly Lys Leu Ala
20 25 30

Gly His Gln Lys Thr Val Pro Thr Ala His Leu Thr Phe Val Ile Asp
35 40 45

Cys Thr His Gly Lys Gln Leu Ser Leu Ala Ala Thr Ala Ser Pro Pro
50 55 60

[illegible][illegible]

```
<210> 253
<211> 69
<212> PRT
<213> Homo sapiens
```

```

<400> 253
Met Phe Asn Val Arg Leu His Gln Asn Met Cys Gln Leu Thr Met Phe
  1                               10                               15

Asn Met Phe His Leu Gln Asn Phe Leu Glu Gly Lys Lys Ser Phe Leu
  20                               25                               30

Val Asn Met Phe Phe Cys Leu Cys Phe Ile Ile Leu Ser Thr Met Asp
  35                               40                               45

Thr Gly Asn Gln Ser Thr Val Asn Asn His Arg His His Phe Val Val
  50                               55                               60

Leu Phe Leu Arg Val
  65

```

```
<210> 254
<211> 33
<212> PRT
<213> Homo sapiens
```

<400> 254

Met Glu Val Arg Ser Val Ile Pro Gln Val Leu Asn Ala Trp Ala Ser
1 5 10 15

Leu Met Ser Phe Tyr Gln Leu Ser Ala Thr Cys Val Lys Phe His Leu
20 25 30

Ser

<210> 255

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (59)

<220>

<221> UNSURE

<222> (65)

<400> 255

Met Trp Thr Thr Cys Asn Val Thr Lys Gln Lys Glu Thr Gln Glu Ala
1 5 10 15

Asn Ile Pro Ile Tyr Ser Pro Leu Ser Ala Leu Thr Gln Gln Asn Lys
20 25 30

Thr Lys Pro Ala Thr Thr Ile Arg Phe Val Lys Ile Leu Val Val Arg
35 40 45

Ile Pro Thr Leu Ser Ser Gln Gln Phe Gly Xaa Gln Lys Ser Leu Val
50 55 60

Xaa Met Ser Val His Val Lys Ser
65 70

<210> 256

<211> 131

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (31) .. (93)

<220>

<221> UNSURE

 $\langle 222 \rangle \quad (111) \dots (121)$

<400> 256

Met Tyr Ala Ser Asn Asn Leu Ser Arg Gly Arg Ile Pro Lys Glu Asn
1 5 10 15

Ile Cys Ser Ser Phe Phe Leu Leu Arg Phe Phe Cys Ile Phe Xaa Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
65					70					75					80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Thr Val Phe
85 90 95

Pro Leu Leu Ser Tyr Asn Asn Gln His Arg Arg Leu Leu Trp Xaa Gln
100 105 110

Met Trp Gly Asn Phe Phe His Ala Lys Xaa Ala Val Arg Ala Ala Val
115 120 125

Ser Pro Thr
130

<210> 257

<211> 44

<212> PRT

<213> Homo sapiens

<400> 257

Glu Ser Phe Tyr Asp Thr Phe His Thr Val Ala Asp Met Met Tyr Phe
1 5 10 15

Cys Gln Met Leu Ala Val Val Glu Thr Ile Asn Ala Ala Ile Gly Val
20 25 30

Thr Thr Ser Pro Val Leu Pro Ser Leu Ile Gln Val
35 40

```
<210> 258
<211> 70
<212> PRT
<213> Homo sapiens
```

```
<220>  
<221> UNSURE  
<222> (8) .. (52)
```

<220>
<221> UNSURE
<222> (57)

<400> 258
Met Phe Ile Phe Thr Phe His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20					25					30	

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Xaa Xaa Xaa Xaa Cys Phe Phe Pro Xaa Trp Phe Leu Leu Phe Leu Leu
50 55 60

Arg Ser Val Ser Phe Cys
65 70

```
<210> 259
<211> 61
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> UNSURE
<222> (16) .. (53)
```

```
<400> 259
Met Lys Ile Thr Tyr Leu Asp Ile Leu Glu Lys Tyr Ile His Ser Xaa
  1             5             10            15
```

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

35 40 45

Xaa Xaa Xaa Xaa Xaa Glu Ser Thr Gln Ile Gly Pro Glu

50 55 60

```
<210> 260
<211> 2383
<212> PRT
<213> Homo sapiens
```

<400> 260
Met Glu Thr Arg Ser Pro Gly Leu Asn Asn Met Lys Pro Gln Ser Leu
1 5 10 15

Gln Leu Val Leu Glu Glu Gln Val Leu Ala Leu Gln Gln Gln Met Ala
20 25 30

Glu Asn Gln Ala Ala Ser Trp Arg Lys Leu Lys Asn Ser Gln Glu Ala
35 40 45

Gln Gln Arg Gln Ala Thr Leu Val Arg Lys Leu Gln Ala Lys Val Leu
50 55 60

Gln Tyr Arg Ser Trp Cys Gln Glu Leu Glu Lys Arg Leu Glu Ala Thr
65 70 75 80

Gly Gly Pro Ile Pro Gln Arg Trp Glu Asn Val Glu Glu Pro Asn Leu
85 90 95

Asp Glu Leu Leu Val Arg Leu Glu Glu Glu Gln Gln Arg Cys Glu Ser
100 105 110

Leu Ala Gln Val Asn Thr Gln Leu Arg Leu His Met Glu Lys Ala Asp
115 120 125

Val	Val	Asn	Lys	Ala	Leu	Arg	Glu	Asp	Val	Glu	Lys	Leu	Thr	Val	Asp
130						135					140				

Trp Ser Arg Ala Arg Asp Glu Leu Met Arg Lys Glu Ser Gln Trp Gln
145 150 155 160

Met Glu Gln Glu Trp Ser Leu Leu Phe Ser Leu Leu Val Leu Arg Asp
165 170 175

Leu Met Glu Leu Lys Ala Glu His Val Arg Leu Ser Gly Ser Leu Leu
 180 185 190

Thr Cys Cys Leu Arg Leu Thr Val Gly Ala Gln Ser Arg Glu Pro Asn
 195 200 205

Gly Ser Gly Arg Met Asn Gly Arg Glu Pro Ala Gln Leu Leu Leu Leu
 210 215 220

Leu Ala Lys Thr Gln Glu Leu Glu Lys Glu Ala His Glu Arg Ser Gln
 225 230 235 240

Glu Leu Ile Gln Leu Lys Ser Gln Gly Asp Leu Glu Lys Ala Glu Leu
 245 250 255

Gln Asp Arg Val Thr Glu Leu Ser Ala Leu Leu Thr Gln Ser Gln Lys
 260 265 270

Gln Asn Glu Asp Tyr Glu Lys Met Ile Lys Ala Leu Arg Glu Thr Val
 275 280 285

Glu Ile Leu Glu Thr Asn His Thr Glu Leu Met Glu His Glu Ala Ser
 290 295 300

Leu Ser Arg Asn Ala Gln Glu Glu Lys Leu Ser Leu Gln Gln Val Ile
 305 310 315 320

Lys Asp Ile Thr Gln Val Met Val Glu Glu Gly Asp Asn Ile Ala Gln
 325 330 335

Gly Ser Gly His Glu Asn Ser Leu Glu Leu Asp Ser Ser Ile Phe Ser
 340 345 350

Gln Phe Asp Tyr Gln Asp Ala Asp Lys Ala Leu Thr Leu Val Arg Ser
 355 360 365

Val Leu Thr Arg Arg Arg Gln Ala Val Gln Asp Leu Arg Gln Gln Leu
 370 375 380

Ala Gly Cys Gln Glu Ala Val Asn Leu Leu Gln Gln Gln His Asp Gln
 385 390 395 400

Trp Glu Glu Glu Gly Lys Ala Leu Arg Gln Arg Leu Gln Lys Leu Thr
 405 410 415

Gly Glu Arg Asp Thr Leu Ala Gly Gln Thr Val Asp Leu Gln Gly Glu
 420 425 430

Val Asp Ser Leu Ser Lys Glu Arg Glu Leu Leu Gln Lys Ala Arg Glu
 435 440 445

Glu Leu Arg Gln Gln Leu Glu Val Leu Glu Gln Glu Ala Trp Arg Leu
 450 455 460

Arg Arg Val Asn Val Glu Leu Gln Leu Gln Gly Asp Ser Ala Gln Gly
 465 470 475 480

Gln Lys Glu Glu Gln Gln Glu Glu Leu His Leu Ala Val Arg Glu Arg
 485 490 495

Glu Arg Leu Gln Glu Met Leu Met Gly Leu Glu Ala Lys Gln Ser Glu
 500 505 510

Ser Leu Ser Glu Leu Ile Thr Leu Arg Glu Ala Leu Glu Ser Ser His
 515 520 525

Leu Glu Gly Glu Leu Leu Arg Gln Glu Gln Thr Glu Val Thr Ala Ala
 530 535 540

Leu Ala Arg Ala Glu Gln Ser Ile Ala Glu Leu Ser Ser Ser Glu Asn
 545 550 555 560

Thr Leu Lys Thr Glu Val Ala Asp Leu Arg Ala Ala Ala Val Lys Leu
 565 570 575

Ser Ala Leu Asn Glu Ala Leu Ala Leu Asp Lys Val Gly Leu Asn Gln
 580 585 590

Gln Leu Leu Gln Leu Glu Glu Glu Asn Gln Ser Val Cys Ser Arg Met
 595 600 605

Glu Ala Ala Glu Gln Ala Arg Asn Ala Leu Gln Val Asp Leu Ala Glu
 610 615 620

Ala Glu Lys Arg Arg Glu Ala Leu Trp Glu Lys Asn Thr His Leu Glu
 625 630 635 640

Ala Gln Leu Gln Lys Ala Glu Glu Ala Gly Ala Glu Leu Gln Ala Asp
 645 650 655

Leu Arg Asp Ile Gln Glu Glu Lys Glu Glu Ile Gln Lys Lys Leu Ser
 660 665 670

Glu Ser Arg His Gln Gln Glu Ala Ala Thr Thr Gln Leu Glu Gln Leu
 675 680 685

His	Gln	Glu	Ala	Lys	Arg	Gln	Glu	Glu	Val	Leu	Ala	Arg	Ala	Val	Gln
690						695				700					
Glu	Lys	Glu	Ala	Leu	Val	Arg	Glu	Lys	Ala	Ala	Leu	Glu	Val	Arg	Leu
705					710				715						720
Gln	Ala	Val	Glu	Arg	Asp	Arg	Gln	Asp	Leu	Ala	Glu	Gln	Leu	Gln	Gly
				725					730					735	
Leu	Ser	Ser	Ala	Lys	Glu	Leu	Leu	Glu	Ser	Ser	Leu	Phe	Glu	Ala	Gln
			740					745					750		
Gln	Gln	Asn	Ser	Val	Ile	Glu	Val	Thr	Lys	Gly	Gln	Leu	Glu	Val	Gln
		755					760					765			
Ile	Gln	Thr	Val	Thr	Gln	Ala	Lys	Glu	Val	Ile	Gln	Gly	Glu	Val	Arg
	770					775					780				
Cys	Leu	Lys	Leu	Glu	Leu	Asp	Thr	Glu	Arg	Ser	Gln	Ala	Glu	Gln	Glu
785					790					795					800
Arg	Asp	Ala	Ala	Ala	Arg	Gln	Leu	Ala	Gln	Ala	Glu	Gln	Glu	Gly	Lys
				805					810					815	
Thr	Ala	Leu	Glu	Gln	Gln	Lys	Ala	Ala	His	Glu	Lys	Glu	Val	Asn	Gln
			820					825					830		
Leu	Arg	Glu	Lys	Trp	Glu	Lys	Glu	Arg	Ser	Trp	His	Gln	Gln	Glu	Leu
	835						840					845			
Ala	Lys	Ala	Leu	Glu	Ser	Leu	Glu	Arg	Glu	Lys	Met	Glu	Leu	Glu	Met
	850					855					860				
Arg	Leu	Lys	Glu	Gln	Gln	Thr	Glu	Met	Glu	Ala	Ile	Gln	Ala	Gln	Arg
865					870					875					880
Glu	Glu	Glu	Arg	Thr	Gln	Ala	Glu	Ser	Ala	Leu	Cys	Gln	Met	Gln	Leu
				885					890					895	
Glu	Thr	Glu	Lys	Glu	Arg	Val	Ser	Leu	Leu	Glu	Thr	Leu	Leu	Gln	Thr
			900					905					910		
Gln	Lys	Glu	Leu	Ala	Asp	Ala	Ser	Gln	Gln	Leu	Glu	Arg	Leu	Arg	Gln
		915					920					925			
Asp	Met	Lys	Val	Gln	Lys	Leu	Lys	Glu	Gln	Glu	Thr	Thr	Gly	Ile	Leu
	930					935					940				

Gln Thr	Gln Leu	Gln Glu	Ala Gln	Arg Glu	Leu Lys	Glu Ala	Ala Arg								
945				950					955						960
Gln His	Arg Asp	Asp Leu	Ala Ala	Leu Gln	Arg Glu	Glu Glu	Ser Ser	Ser Leu							
		965						970						975	
Leu Gln	Asp Lys	Met Asp	Leu Gln	Lys Gln	Val Glu	Asp Leu	Lys Ser								
		980					985					990			
Gln Leu	Val Ala	Gln Asp	Asp Ser	Gln Arg	Leu Val	Glu Gln	Glu Val								
	995				1000						1005				
Gln Glu	Lys Leu	Arg Glu	Thr Gln	Glu Tyr	Asn Arg	Ile Gln	Lys Glu								
	1010				1015					1020					
Leu Glu	Arg Glu	Lys Ala	Ser Leu	Thr Leu	Ser Leu	Met Glu	Lys Glu								
1025				1030					1035						1040
Gln Arg	Leu Leu	Val Leu	Gln Glu	Ala Asp	Ser Ile	Arg Gln	Gln Glu								
		1045				1050							1055		
Leu Ser	Ala Leu	Arg Gln	Asp Met	Gln Glu	Ala Gln	Gly Glu	Gln Lys								
		1060				1065						1070			
Glu Leu	Ser Ala	Gln Met	Glu Leu	Leu Arg	Gln Glu	Val Lys	Glu Lys								
	1075				1080						1085				
Glu Ala	Asp Phe	Leu Ala	Gln Glu	Ala Gln	Leu Leu	Glu Glu	Glu Leu								
	1090				1095						1100				
Ala Ser	His Ile	Thr Glu	Gln Gln	Leu Arg	Ala Ser	Leu Trp	Ala Gln								
1105				1110					1115						1120
Glu Ala	Lys Ala	Ala Gln	Leu Gln	Leu Arg	Leu Arg	Ser Thr	Glu Ser								
		1125					1130						1135		
Gln Leu	Glu Ala	Leu Ala	Ala Glu	Gln Gln	Pro Gly	Asn Gln	Ala Gln								
		1140					1145						1150		
Ala Gln	Ala Gln	Leu Ala	Ser Leu	Tyr Ser	Ala Leu	Gln Gln	Ala Leu								
	1155					1160					1165				
Gly Ser	Val Cys	Glu Ser	Arg Pro	Glu Leu	Ser Gly	Gly Gly	Gly Asp	Ser							
	1170					1175					1180				
Ala Pro	Ser Val	Trp Gly	Leu Glu	Pro Asp	Gln Asn	Gly Ala	Arg Ser								
1185				1190					1195						1200

Leu Phe Lys Arg Gly Pro Leu Leu Thr Ala Leu Ser Ala Glu Ala Val
1205 1210 1215

Ala Ser Ala Leu His Lys Leu His Gln Asp Leu Trp Lys Thr Gln Gln
1220 1225 1230

Thr Arg Asp Val Leu Arg Asp Gln Val Gln Lys Leu Glu Glu Arg Leu
1235 1240 1245

Thr Asp Thr Glu Ala Glu Lys Ser Gln Val His Thr Glu Leu Gln Asp
1250 1255 1260

Leu Gln Arg Gln Leu Ser Gln Asn Gln Glu Glu Lys Ser Lys Trp Glu
1265 1270 1275 1280

Gly Lys Gln Asn Ser Leu Glu Ser Glu Leu Met Glu Leu His Glu Thr
1285 1290 1295

Met Ala Ser Leu Gln Ser Arg Leu Arg Arg Ala Glu Leu Gln Arg Met
1300 1305 1310

Glu Ala Gln Gly Glu Arg Glu Leu Leu Gln Ala Ala Lys Glu Asn Leu
1315 1320 1325

Thr Ala Gln Val Glu His Leu Gln Ala Ala Val Val Glu Ala Arg Ala
1330 1335 1340

Gln Ala Ser Ala Ala Gly Ile Leu Glu Glu Asp Leu Arg Thr Ala Arg
1345 1350 1355 1360

Ser Ala Leu Lys Leu Lys Asn Glu Glu Val Glu Ser Glu Arg Glu Arg
1365 1370 1375

Ala Gln Ala Leu Gln Glu Gln Gly Glu Leu Lys Val Ala Gln Gly Lys
1380 1385 1390

Ala Leu Gln Glu Asn Leu Ala Leu Leu Thr Gln Thr Leu Ala Glu Arg
1395 1400 1405

Glu Glu Glu Val Glu Thr Leu Arg Gly Gln Ile Gln Glu Leu Glu Lys
1410 1415 1420

Gln Arg Glu Met Gln Lys Ala Ala Leu Glu Leu Leu Ser Leu Asp Leu
1425 1430 1435 1440

Lys Lys Arg Asn Gln Glu Val Asp Leu Gln Gln Glu Gln Ile Gln Glu
1445 1450 1455

SECRET

Leu Glu Lys Cys Arg Ser Val Leu Glu His Leu Pro Met Ala Val Gln
1460 1465 1470

Glu Arg Glu Gln Lys Leu Thr Val Gln Arg Glu Gln Ile Arg Glu Leu
1475 1480 1485

Glu Lys Asp Arg Glu Thr Gln Arg Asn Val Leu Glu His Gln Leu Leu
1490 1495 1500

Glu Leu Glu Lys Lys Asp Gln Met Ile Glu Ser Gln Arg Gly Gln Val
1505 1510 1515 1520

Gln Asp Leu Lys Lys Gln Leu Val Thr Leu Glu Cys Leu Ala Leu Glu
1525 1530 1535

Leu Glu Glu Asn His His Lys Met Glu Cys Gln Gln Lys Leu Ile Lys
1540 1545 1550

Glu Leu Glu Gly Gln Arg Glu Thr Gln Arg Val Ala Leu Thr His Leu
1555 1560 1565

Thr Leu Asp Leu Glu Glu Arg Ser Gln Glu Leu Gln Ala Gln Ser Ser
1570 1575 1580

Gln Ile His Asp Leu Glu Ser His Ser Thr Val Leu Ala Arg Glu Leu
1585 1590 1595 1600

Gln Glu Arg Asp Gln Glu Val Lys Ser Gln Arg Glu Gln Ile Glu Glu
1605 1610 1615

Leu Gln Arg Gln Lys Glu His Leu Thr Gln Asp Leu Glu Arg Arg Asp
1620 1625 1630

Gln Glu Leu Met Leu Gln Lys Glu Arg Ile Gln Val Leu Glu Asp Gln
1635 1640 1645

Arg Thr Arg Gln Thr Lys Ile Leu Glu Glu Asp Leu Glu Gln Ile Lys
1650 1655 1660

Leu Ser Leu Arg Glu Arg Gly Arg Glu Leu Thr Thr Gln Arg Gln Leu
1665 1670 1675 1680

Met Gln Glu Arg Ala Glu Glu Gly Lys Gly Pro Ser Lys Ala Gln Arg
1685 1690 1695

Gly Ser Leu Glu His Met Lys Leu Ile Leu Arg Asp Lys Glu Lys Glu
1700 1705 1710

Val	Glu	Cys	Gln	Gln	Glu	His	Ile	His	Glu	Leu	Gln	Leu	Lys	Asp					
1715					1720					1725									
Gln	Leu	Glu	Gln	Gln	Leu	Gln	Gly	Leu	His	Arg	Lys	Val	Gly	Glu	Thr				
1730					1735					1740									
Ser	Leu	Leu	Leu	Ser	Gln	Arg	Glu	Gln	Glu	Ile	Val	Val	Leu	Gln	Gln				
1745					1750					1755					1760				
Gln	Leu	Gln	Glu	Ala	Arg	Glu	Gln	Gly	Glu	Leu	Lys	Glu	Gln	Ser	Leu				
1765					1770					1775									
Gln	Ser	Gln	Leu	Asp	Glu	Ala	Gln	Arg	Ala	Leu	Ala	Gln	Arg	Asp	Gln				
1780					1785					1790									
Glu	Leu	Glu	Ala	Leu	Gln	Gln	Glu	Gln	Gln	Gln	Ala	Gln	Gly	Gln	Glu				
1795					1800					1805									
Glu	Arg	Val	Lys	Glu	Lys	Ala	Asp	Ala	Leu	Gln	Gly	Ala	Leu	Glu	Gln				
1810					1815					1820									
Ala	His	Met	Thr	Leu	Lys	Glu	Arg	His	Gly	Glu	Leu	Gln	Asp	His	Lys				
1825					1830					1835					1840				
Glu	Gln	Ala	Arg	Arg	Leu	Glu	Glu	Glu	Leu	Ala	Val	Glu	Gly	Arg	Arg				
1845					1850					1855									
Val	Gln	Ala	Leu	Glu	Glu	Val	Leu	Gly	Asp	Leu	Arg	Ala	Glu	Ser	Arg				
1860					1865					1870									
Glu	Gln	Glu	Lys	Ala	Leu	Leu	Ala	Leu	Gln	Gln	Gln	Cys	Ala	Glu	Gln				
1875					1880					1885									
Ala	Gln	Glu	His	Glu	Val	Glu	Thr	Arg	Ala	Leu	Gln	Asp	Ser	Trp	Leu				
1890					1895					1900									
Gln	Ala	Gln	Ala	Val	Leu	Lys	Glu	Arg	Asp	Gln	Glu	Leu	Glu	Ala	Leu				
1905					1910					1915					1920				
Arg	Ala	Glu	Ser	Gln	Ser	Ser	Arg	His	Gln	Glu	Glu	Ala	Ala	Arg	Ala				
1925					1930					1935									
Arg	Ala	Glu	Ala	Leu	Gln	Glu	Ala	Leu	Gly	Lys	Ala	His	Ala	Ala	Leu				
1940					1945					1950									
Gln	Gly	Lys	Glu	Gln	His	Leu	Leu	Glu	Gln	Ala	Glu	Leu	Ser	Arg	Ser				
1955					1960					1965									

31 MAR 1967 11 06 AM

Leu Glu Ala Ser Thr Ala Thr Leu Gln Ala Ser Leu Asp Ala Cys Gln
1970 1975 1980

Ala His Ser Arg Gln Leu Glu Glu Ala Leu Arg Ile Gln Glu Gly Glu
1985 1990 1995 2000

Ile Gln Asp Gln Asp Leu Arg Tyr Gln Glu Asp Val Gln Gln Leu Gln
2005 2010 2015

Gln Ala Leu Ala Gln Arg Asp Glu Glu Leu Arg His Gln Gln Glu Arg
2020 2025 2030

Glu Gln Leu Leu Glu Lys Ser Leu Ala Gln Arg Val Gln Glu Asn Met
2035 2040 2045

Ile Gln Glu Lys Gln Asn Leu Gly Gln Glu Arg Glu Glu Glu Glu Ile
2050 2055 2060

Arg Gly Leu His Gln Ser Val Arg Glu Leu Gln Leu Thr Leu Ala Gln
2065 2070 2075 2080

Lys Glu Gln Glu Ile Leu Glu Leu Arg Glu Thr Gln Gln Arg Asn Asn
2085 2090 2095

Leu Glu Ala Leu Pro His Ser His Lys Thr Ser Pro Met Glu Glu Gln
2100 2105 2110

Ser Leu Lys Leu Asp Ser Leu Glu Pro Arg Leu Gln Arg Glu Leu Glu
2115 2120 2125

Arg Leu Gln Ala Ala Leu Arg Gln Thr Glu Ala Arg Glu Ile Glu Trp
2130 2135 2140

Arg Glu Lys Ala Gln Asp Leu Ala Leu Ser Leu Ala Gln Thr Lys Ala
2145 2150 2155 2160

Ser Val Ser Ser Leu Gln Glu Val Ala Met Phe Leu Gln Ala Ser Val
2165 2170 2175

Leu Glu Arg Asp Ser Glu Gln Gln Arg Leu Gln Asp Glu Leu Glu Leu
2180 2185 2190

Thr Arg Arg Ala Leu Glu Lys Glu Arg Leu His Ser Pro Gly Ala Thr
2195 2200 2205

Ser Thr Ala Glu Leu Gly Ser Arg Gly Glu Gln Gly Val Gln Leu Gly
2210 2215 2220

SECRET

Glu Val Ser Gly Val Glu Ala Glu Pro Ser Pro Asp Gly Met Glu Lys
2225 2230 2235 2240

Gln Ser Trp Arg Gln Arg Leu Glu His Leu Gln Gln Ala Val Ala Arg
2245 2250 2255

Leu Glu Ile Asp Arg Ser Arg Leu Gln Arg His Asn Val Gln Leu Arg
2260 2265 2270

Ser Thr Leu Glu Gln Asp Gly Arg Gly Gln Lys Asn Ser Asp Ala Lys
2275 2280 2285

Cys Val Ala Glu Leu Gln Lys Glu Val Val Leu Leu Gln Ala Gln Leu
2290 2295 2300

Thr Leu Glu Arg Lys Gln Lys Gln Asp Tyr Ile Thr Arg Ser Ala Gln
2305 2310 2315 2320

Thr Ser Arg Glu Leu Ala Gly Leu His His Ser Leu Ser His Ser Leu
2325 2330 2335

Leu Ala Val Ala Gln Ala Pro Glu Ala Thr Val Leu Glu Ala Glu Thr
2340 2345 2350

Arg Arg Leu Asp Glu Ser Leu Thr Gln Ser Leu Thr Ser Pro Gly Pro
2355 2360 2365

Val Leu Leu His Pro Ser Pro Ser Thr Thr Gln Ala Ala Ser Arg
2370 2375 2380

<210> 261

<211> 43

<212> PRT

<213> Homo sapiens

<400> 261

Met Tyr Arg Leu Ile Leu Phe Arg Asn Asn Ser Val Leu Glu Phe Ile
1 5 10 15

Lys Asn Ser Val Ile Ala Phe Ile Pro Lys Cys Leu Thr Leu Pro Thr
20 25 30

Ala Ser His Lys Ser Ile Tyr Phe Lys Ala Phe
35 40

<210> 262

<211> 34
 <212> PRT
 <213> Homo sapiens

<400> 262
 Met Asp Pro Asn Phe Asp Ile Val His Thr Val Phe Ile Leu Cys Met
 1 5 10 15
 Glu Leu Ile Thr Asp Phe Ala Cys Lys Glu Arg Ile Val Cys Leu Asn
 20 25 30
 Phe Val

<210> 263
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 263
 Met Met Glu Asn Ser Ala Pro Asn Ser Leu Met Asn Lys Glu Met Asp
 1 5 10 15
 His Leu Met Asp Glu Gly Val Gln Arg Thr Arg Val Ala Leu Gly Gln
 20 25 30
 Trp Leu Val Ala Ala Val Ile Gln Asp Leu Gly Ser Val Leu Cys Pro
 35 40 45
 Leu Pro Pro Ser Val Leu Ala Ser Arg Trp Gln Gly Val Ser Phe Pro
 50 55 60
 Glu Ser His Gln Leu Arg Gln Asn Pro Glu Ala Gly Lys Thr
 65 70 75

<210> 264
 <211> 85
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (15)..(72)

<400> 264
 Met Gly Ile Tyr Ile Ile Tyr Ser Pro Arg Thr Val Ile Arg Xaa Xaa

```

      1             5             10             15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      20             25             30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      35             40             45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      50             55             60
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      65             70             75             80
Leu Val Leu Gly Phe
      85

```

```

<210> 265
<211> 471
<212> PRT
<213> Homo sapiens

```

```

<400> 265
Leu Ser Phe Gln Ser Gly Asn Ile Ile Val Ala Thr Pro Gly Arg Leu
  1             5             10             15
Glu Asp Met Phe Arg Arg Lys Ala Glu Gly Leu Asp Leu Ala Ser Cys
      20             25             30
Val Arg Ser Leu Asp Val Leu Val Leu Asp Glu Ala Asp Arg Leu Leu
      35             40             45
Asp Met Gly Phe Glu Ala Ser Ile Asn Thr Ile Leu Glu Phe Leu Pro
      50             55             60
Lys Gln Arg Arg Thr Gly Leu Phe Ser Ala Thr Gln Thr Gln Glu Val
      65             70             75             80
Glu Asn Leu Val Arg Ala Gly Leu Arg Asn Pro Val Arg Val Ser Val
      85             90             95
Lys Glu Lys Gly Val Ala Ala Ser Ser Ala Gln Lys Thr Pro Ser Arg
      100            105            110
Leu Glu Asn Tyr Tyr Met Val Cys Lys Ala Asp Glu Lys Phe Asn Gln
      115            120            125

```

Leu Val His Phe Leu Arg Asn His Lys Gln Glu Lys His Leu Val Phe
 130 135 140

Phe Gly Thr Cys Ala Cys Val Glu Tyr Tyr Gly Lys Ala Leu Glu Val
 145 150 155 160

Leu Val Lys Gly Val Lys Ile Met Cys Ile His Gly Lys Met Lys Tyr
 165 170 175

Lys Arg Asn Lys Ile Phe Met Glu Phe Arg Lys Leu Gln Gly Gly Ile
 180 185 190

Leu Val Cys Thr Asp Val Met Ala Arg Gly Ile Asp Ile Pro Glu Val
 195 200 205

Asn Trp Val Leu Gln Tyr Asp Pro Pro Ser Asn Ala Ser Ala Phe Val
 210 215 220

His Arg Cys Gly Arg Thr Ala Arg Ile Gly His Gly Gly Ser Ala Leu
 225 230 235 240

Val Phe Leu Leu Pro Met Glu Glu Ser Tyr Ile Asn Phe Leu Ala Ile
 245 250 255

Asn Gln Lys Cys Pro Leu Gln Glu Met Lys Pro Gln Arg Asn Thr Ala
 260 265 270

Asp Leu Leu Pro Lys Leu Lys Ser Met Ala Leu Ala Asp Arg Ala Val
 275 280 285

Phe Glu Lys Gly Met Lys Ala Phe Val Ser Tyr Val Gln Ala Tyr Ala
 290 295 300

Lys His Glu Cys Asn Leu Ile Phe Arg Leu Lys Asp Leu Asp Phe Ala
 305 310 315 320

Ser Leu Ala Arg Gly Phe Ala Leu Leu Arg Met Pro Lys Met Pro Glu
 325 330 335

Leu Arg Gly Lys Gln Phe Pro Asp Phe Val Pro Val Asp Val Asn Thr
 340 345 350

Asp Thr Ile Pro Phe Lys Asp Lys Ile Arg Glu Lys Gln Arg Gln Lys
 355 360 365

Leu Leu Glu Gln Gln Arg Arg Glu Lys Thr Glu Asn Glu Gly Arg Arg
 370 375 380

[illegible]

Lys Phe Ile Lys Asn Lys Ala Trp Ser Lys Gln Lys Ala Lys Lys Glu
385 390 395 400

Lys Lys Lys Lys Met Asn Glu Lys Arg Lys Arg Glu Glu Gly Ser Asp
405 410 415

Ile Glu Asp Glu Asp Met Glu Glu Leu Leu Asn Asp Thr Arg Leu Leu
420 425 430

Lys Lys Leu Lys Lys Gly Lys Ile Thr Glu Glu Glu Phe Glu Lys Gly
435 440 445

Leu Leu Thr Thr Gly Lys Arg Thr Ile Lys Thr Val Asp Leu Gly Ile
450 455 460

Ser Asp Leu Glu Asp Asp Cys
465 470

```
<210> 266
<211> 20
<212> PRT
<213> Homo sapiens
```

<400> 266
Met Met Thr Ser Leu Ser Tyr Ser Ser Gln Ser Trp Lys Pro Cys Ser
1 5 10 15

Gln Ser Phe Lys
20

```
<210> 267
<211> 27
<212> PRT
<213> Homo sapiens
```

```
<400> 267
Met Val Phe Leu Glu Ile Ile Phe Cys Pro Met Tyr Ser Ile Phe Ile
  1             5             10             15
```

His Thr Gly Phe Ile Met Ile Ile Ile Ser Lys
20 25

```
<210> 268
<211> 55
<212> PRT
```


[illegible]

<213> Homo sapiens

<400> 268

Met	Leu	Arg	Gly	Asp	Leu	Pro	Gly	Ser	Val	Leu	Pro	Leu	Ser	Leu	Arg
1				5					10					15	

Leu Asn Gly Ala Pro Pro Arg Leu Leu Pro Gly Lys Lys His Ser Gly
20 25 30

Gln Ala Gly Pro Glu Pro Val Ser Val Arg Gly Pro Val Ala Cys Pro
35 40 45

Gly Gly Arg Ser Leu Gln Gly
50 55

<210> 269

<211> 38

<212> PRT

<213> Homo sapiens

<400> 269

Met	Asn	Glu	Ala	Asn	Arg	Leu	Phe	Phe	Val	Ser	Leu	Thr	Pro	Arg	Asn
1				5					10					15	

Ile Met Ile Pro Tyr Lys Ile Leu Ile His Thr His Asp Gln Tyr Phe
20 25 30

Ile Pro Thr Glu Thr Val
35

<210> 270

<211> 71

<212> PRT

<213> Homo sapiens

<400> 270

Met Leu Thr Leu Val Tyr Leu Val Val Glu Asn Gly Leu Leu Pro Leu
1 5 10 15

Phe Pro Glu Leu Thr Leu Phe Pro Leu Ala Arg Arg Ser Gly Gln Arg
20 25 30

Glu Pro Arg Thr Glu Val Pro Thr Thr Gln Gln Ala Leu Ser Ser Pro
35 40 45

Leu Thr Ser Asn Val Cys Ile His Phe Gln Pro Leu Thr Asp Leu Val

50 55

Phe Gln Cys Ile Ile Ile Leu

65 70

```
<210> 271
<211> 65
<212> PRT
<213> Homo sapiens
```

```

<400> 271
Met Glu Glu Ser Lys Ala Gln Arg Arg Arg Glu Thr Thr Trp Ser Val
  1                      5                      10                      15
.
Ser Leu Ser Gln Leu Ile Gln His Pro Thr Asn His Pro Ser His Ser
      20                      25                      30
Leu Ser Ile Ser Leu Val Asn Trp Ser Thr Ile Cys Asn Cys Ser Gln
      35                      40                      45
Val Pro Pro Asn Ser Leu Cys Arg Tyr Phe Ser Cys Val Phe His Ser
      50                      55                      60

```

Leu
65

```
<210> 272
<211> 25
<212> PRT
<213> Homo sapiens
```

<400> 272
Met Val Pro Ile Ile Ser Tyr Val Lys Met Ser Cys Tyr Glu Lys Leu
1 5 10 15

Phe Leu Phe Gln Ser Cys Gln Cys Gln
20 25

```
<210> 273
<211> 13
<212> PRT
<213> Homo sapiens
```

<400> 273
Met Leu Leu Ser Tyr Ser Ala Gln Glu Tyr Leu Ser Lys

51 52 53 54 55 56 57 58 59 60

1 5 10

<210> 274
<211> 73
<212> PRT
<213> Homo sapiens

<400> 274
Met Lys Cys Val Ser Glu His Gln Arg Pro Ser Ile Leu Pro Leu Pro
1 5 10 15
Phe Leu Val Val Tyr Lys Asn Ser Arg Leu Glu Glu Phe Arg Phe Val
20 25 30
Ala His Phe Phe Pro Gln His Phe Phe Leu Leu Phe Phe Lys Met Tyr
35 40 45
Cys Leu Phe Pro His Ser Val Thr Leu Asp Ile Gly Ile Phe Asn Cys
50 55 60
Val Ile Phe Cys Cys Lys Lys Gly Lys
65 70

<210> 275
<211> 465
<212> PRT
<213> Homo sapiens

<400> 275
Met Leu Gly Ser Met Ala Arg Lys Lys Pro Arg Asn Thr Ser Arg Leu
1 5 10 15
Pro Leu Ala Leu Asn Pro Leu Lys Ser Lys Asp Val Leu Ala Val Leu
20 25 30
Ala Glu Arg Asn Glu Ala Ile Val Pro Val Gly Ala Trp Val Glu Pro
35 40 45
Ala Ser Pro Gly Ser Ser Glu Ile Pro Ala Tyr Thr Ser Ala Tyr Leu
50 55 60
Ile Glu Glu Glu Leu Lys Glu Gln Leu Arg Lys Lys Gln Glu Ala Leu
65 70 75 80
Lys His Phe Gln Lys Gln Val Lys Tyr Arg Val Asn Gln Gln Ile Arg
85 90 95

Leu	Arg	Lys	Lys	Gln	Gln	Leu	Gln	Lys	Ser	Tyr	Glu	Arg	Ala	Gln	Lys	
			100						105						110	
Glu	Gly	Ser	Ile	Ala	Met	Gln	Ser	Ser	Ala	Thr	His	Leu	Thr	Ser	Lys	
			115						120						125	
Arg	Thr	Ser	Val	Phe	Pro	Asn	Asn	Leu	Asn	Val	Ala	Ile	Gly	Ser	Ser	
			130						135						140	
Arg	Leu	Pro	Pro	Ser	Leu	Met	Pro	Gly	Asp	Gly	Ile	Glu	Asp	Glu	Glu	
145						150						155			160	
Asn	Gln	Asn	Glu	Leu	Phe	Gln	Gln	Gln	Ala	Gln	Ala	Leu	Ser	Glu	Thr	
			165						170						175	
Met	Lys	Gln	Ala	Arg	His	Arg	Leu	Ala	Ser	Phe	Lys	Thr	Val	Ile	Lys	
			180						185						190	
Lys	Lys	Gly	Ser	Val	Phe	Pro	Asp	Asp	Gly	Arg	Lys	Ser	Phe	Leu	Thr	
			195						200						205	
Arg	Glu	Glu	Val	Leu	Ser	Arg	Lys	Pro	Ala	Ser	Thr	Gly	Ile	Asn	Thr	
210						215						220				
Gly	Ile	Arg	Gly	Glu	Leu	Pro	Ile	Lys	Val	His	Gln	Gly	Leu	Leu	Ala	
225						230						235			240	
Ala	Val	Pro	Tyr	Gln	Asn	Tyr	Met	Glu	Asn	Gln	Glu	Leu	Asp	Tyr	Glu	
			245						250						255	
Glu	Pro	Asp	Tyr	Glu	Glu	Ser	Ser	Ser	Leu	Val	Thr	Asp	Glu	Lys	Gly	
			260						265						270	
Lys	Glu	Asp	Leu	Phe	Gly	Arg	Gly	Gln	Gln	Asp	Gln	Gln	Ala	Ile	His	
			275						280						285	
Ser	Glu	Asp	Lys	Asn	Lys	Pro	Phe	Ser	Arg	Val	Gln	Lys	Val	Lys	Phe	
290						295						300				
Lys	Asn	Pro	Leu	Phe	Val	Leu	Met	Glu	Glu	Glu	Glu	Gln	Lys	Gln	Leu	
305						310						315			320	
His	Phe	Glu	Gly	Leu	Gln	Asp	Ile	Leu	Pro	Glu	Ala	Gln	Asp	Tyr	Phe	
			325						330						335	
Leu	Glu	Ala	Gln	Gly	Asp	Leu	Leu	Glu	Thr	Gln	Gly	Asp	Leu	Thr	Gly	
			340						345						350	

Ile Gln Ser Val Lys Pro Asp Thr Gln Ala Val Glu Met Lys Val Gln
355 360 365

Val	Thr	Glu	Pro	Glu	Gly	Gln	Ala	Ile	Glu	Pro	Glu	Gly	Gln	Pro	Ile
370						375					380				

Lys Thr Glu Thr Gln Gly Ile Met Leu Lys Ala Gln Ser Ile Glu Leu
385 390 395 400

Glu Glu Gly Ser Ile Val Leu Lys Thr Gln Asp Phe Leu Pro Thr Asn
405 410 415

Gln Ala Leu Leu Thr Lys Asn Gln Asp Val Leu Leu Lys Asp His Cys
420 425 430

Val	Leu	Pro	Lys	Asp	Gln	Ser	Ile	Leu	Leu	Lys	Tyr	Gln	Asp	Gln	Asp
		435					440					445			

Phe Leu Pro Arg Asp Gln His Val Leu His Lys Asp Gln Asp Ile Leu
450 455 460

Pro
465

```
<210> 276
<211> 38
<212> PRT
<213> Homo sapiens
```

```
<400> 276
Met Asn Lys Gln Lys Ile Lys Met Phe Arg Met Lys Ile Leu Leu Lys
  1             5             10            15
```

Trp Ser Leu Glu Ile Thr Val Met Ser Ala Leu Gly Ile Glu Ser Arg
20 25 30

Ile Asn Ser Gln Ile Pro
35

```
<210> 277
<211> 170
<212> PRT
<213> Homo sapiens
```

<400> 277

Met Asp Ile Glu Arg Glu Gln Val Lys Glu Gln Gln Arg Gln Lys Glu
 1 5 10 15

Gln Lys Lys Lys Ile Glu Lys Ile Lys Lys Lys Arg Glu Gln Glu Cys
 20 25 30

Tyr Ala Ala Glu Gln Arg Ile Leu Arg Met Asn Phe His Glu Asp Pro
 35 40 45

Tyr Ser Gly Glu Lys Leu Ser Glu Ile Leu Ala Gln Leu Gln Leu Gln
 50 55 60

Glu Ile Lys Gly Thr Arg Glu Lys Gln Gln Arg Glu Lys Glu Tyr Leu
 65 70 75 80

Arg Tyr Val Glu Ala Leu Arg Ala Gln Ile Gln Glu Lys Met Gln Leu
 85 90 95

Tyr Asn Ile Thr Leu Pro Pro Leu Cys Cys Cys Gly Pro Asp Phe Trp
 100 105 110

Asp Ala His Pro Asp Thr Cys Ala Asn Asn Cys Ile Phe Tyr Lys Asn
 115 120 125

His Arg Ala Tyr Thr Arg Ala Leu His Ser Phe Ile Asn Ser Cys Asp
 130 135 140

Val Pro Gly Gly Asn Ser Thr Leu Arg Val Ala Ile His Asn Phe Ala
 145 150 155 160

Ser Ala His Arg Arg Thr Leu Lys Asn Leu
 165 170

<210> 278

<211> 173

<212> PRT

<213> Homo sapiens

<400> 278

Ala Tyr Asp Arg Tyr Gln Ser Gly Leu Ser Thr Glu Phe Gln Ala Pro
 1 5 10 15

Leu Ala Phe Gln Ser Asp Val Asp Lys Glu Glu Asp Lys Lys Glu Arg
 20 25 30

Gln Lys Gln Tyr Leu Arg His Arg Arg Leu Phe Met Asp Ile Glu Arg
 35 40 45

Glu Gln Val Lys Glu Gln Gln Arg Gln Lys Glu Gln Lys Lys Lys Ile
50 55 60

Glu Lys Ile Lys Lys Lys Arg Glu Gln Glu Cys Tyr Ala Ala Glu Gln
65 70 75 80

Arg Ile Leu Arg Met Asn Phe His Glu Asp Pro Tyr Ser Gly Glu Lys
85 90 95

Leu Ser Glu Ile Leu Ala Gln Leu Gln Leu Gln Glu Ile Lys Gly Thr
100 105 110

Arg Glu Lys Gln Gln Arg Glu Lys Glu Tyr Leu Arg Tyr Val Glu Ala
115 120 125

Leu Arg Ala Gln Ile Gln Glu Lys Met Gln Leu Tyr Asn Ile Thr Leu
130 135 140

Pro	Pro	Leu	Cys	Cys	Cys	Gly	Pro	Asp	Phe	Trp	Asp	Ala	His	Pro	Asp
145					150					155					160

Thr Cys Ala Asn Asn Cys Ile Phe Tyr Lys Asn His Arg
165 170

```
<210> 279
<211> 15
<212> PRT
<213> Homo sapiens
```

```
<400> 279
Met Ile Ser Arg Ile Leu Pro Phe Ile Tyr Ser Thr Ser Ile Arg
  1             5             10             15
```

```
<210> 280
<211> 11
<212> PRT
<213> Homo sapiens
```

<220>
<221> UNSURE
<222> (8)

```
<400> 280
Met Asp Thr Gly Leu Phe Phe Xaa Gly Ala Gly
      1             5             10
```

<210> 281
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 281
 Met Ala Val Ser Leu Phe Leu Ser Ala Asp Pro Ser Met Thr Leu Ile
 1 5 10 15
 Arg Phe Pro Phe Ser Tyr Asn Ser Cys Pro Trp Ile Gln Trp Pro Ser
 20 25 30
 Phe Phe Ser Phe Ala Leu Phe Ser Val Thr Val His His Ile Phe Tyr
 35 40 45
 Thr Ala Val Asp Val Ile Tyr Ser Asn Asp Val Pro Val Pro Phe Val
 50 55 60
 Cys Leu Phe Leu Glu Thr Pro Ser Gly Ala Phe His Leu Pro Gly Ser
 65 70 75 80
 Asn Leu Asp Trp Leu Leu
 85

<210> 282
 <211> 1339
 <212> PRT
 <213> Homo sapiens

<400> 282
 Met Ala Val Tyr Cys Tyr Ala Leu Asn Ser Leu Val Ile Met Asn Ser
 1 5 10 15
 Ala Asn Glu Met Lys Ser Gly Gly Gly Pro Gly Pro Ser Gly Ser Glu
 20 25 30
 Thr Pro Pro Pro Pro Arg Arg Ala Val Leu Ser Pro Gly Ser Val Phe
 35 40 45
 Ser Pro Gly Arg Gly Ala Ser Phe Leu Phe Pro Pro Ala Glu Ser Leu
 50 55 60
 Ser Pro Glu Glu Pro Arg Ser Pro Gly Gly Trp Arg Ser Gly Arg Arg
 65 70 75 80

Arg	Leu	Asn	Ser	Ser	Ser	Gly	Ser	Gly	Ser	Gly	Ser	Ser	Gly	Ser	Ser		
				85				90				95					
Val	Ser	Ser	Pro	Ser	Trp	Ala	Gly	Arg	Leu	Arg	Gly	Asp	Arg	Gln	Gln		
				100				105				110					
Val	Val	Ala	Ala	Gly	Thr	Leu	Ser	Pro	Pro	Gly	Pro	Glu	Glu	Ala	Lys		
				115				120				125					
Arg	Lys	Leu	Arg	Ile	Leu	Gln	Arg	Glu	Leu	Gln	Asn	Val	Gln	Val	Asn		
				130				135				140					
Gln	Lys	Val	Gly	Met	Phe	Glu	Ala	His	Ile	Gln	Ala	Gln	Ser	Ser	Ala		
145								150				155				160	
Ile	Gln	Ala	Pro	Arg	Ser	Pro	Arg	Leu	Gly	Arg	Ala	Arg	Ser	Pro	Ser		
				165				170				175					
Pro	Cys	Pro	Phe	Arg	Ser	Ser	Ser	Gln	Pro	Pro	Gly	Arg	Val	Leu	Val		
				180				185				190					
Gln	Gly	Ala	Arg	Ser	Glu	Glu	Arg	Arg	Thr	Lys	Ser	Trp	Gly	Glu	Gln		
				195				200				205					
Cys	Pro	Glu	Thr	Ser	Gly	Thr	Asp	Ser	Gly	Arg	Lys	Gly	Gly	Pro	Ser		
				210				215				220					
Leu	Cys	Ser	Ser	Gln	Val	Lys	Lys	Gly	Met	Pro	Pro	Leu	Pro	Gly	Arg		
225				230				235				240					
Ala	Ala	Pro	Thr	Gly	Ser	Glu	Ala	Gln	Gly	Pro	Ser	Ala	Phe	Val	Arg		
				245				250				255					
Met	Glu	Lys	Gly	Ile	Pro	Ala	Ser	Pro	Arg	Cys	Gly	Ser	Pro	Thr	Ala		
				260				265				270					
Met	Glu	Ile	Asp	Lys	Arg	Gly	Ser	Pro	Thr	Pro	Gly	Thr	Arg	Ser	Cys		
				275				280				285					
Leu	Ala	Pro	Ser	Leu	Gly	Leu	Phe	Gly	Ala	Ser	Leu	Thr	Met	Ala	Thr		
290				295				300									
Glu	Val	Ala	Ala	Arg	Val	Thr	Ser	Thr	Gly	Pro	His	Arg	Pro	Gln	Asp		
305				310				315				320					
Leu	Ala	Leu	Thr	Glu	Pro	Ser	Gly	Arg	Ala	Arg	Glu	Leu	Glu	Asp	Leu		
				325				330				335					

Gln Pro Pro Glu Ala Leu Val Glu Arg Gln Gly Gln Phe Leu Gly Ser
340 345 350

Glu Thr Ser Pro Ala Pro Glu Arg Gly Gly Pro Arg Asp Gly Glu Pro
355 360 365

Pro Gly Lys Met Gly Lys Gly Tyr Leu Pro Cys Gly Met Pro Gly Ser
370 375 380

Gly Glu Pro Glu Val Gly Lys Arg Pro Glu Glu Thr Thr Val Ser Val
385 390 395 400

Gln Ser Ala Glu Ser Ser Asp Ser Leu Ser Trp Ser Arg Leu Pro Arg
405 410 415

Ala Leu Ala Ser Val Gly Pro Glu Glu Ala Arg Ser Gly Ala Pro Val
420 425 430

Gly Gly Gly Arg Trp Gln Leu Ser Asp Arg Val Glu Gly Gly Ser Pro
435 440 445

Thr Leu Gly Leu Leu Gly Gly Ser Pro Ser Ala Gln Pro Gly Thr Gly
450 455 460

Asn Val Glu Ala Gly Ile Pro Ser Gly Arg Met Leu Glu Pro Leu Pro
465 470 475 480

Cys Trp Asp Ala Ala Lys Asp Leu Lys Glu Pro Gln Cys Pro Pro Gly
485 490 495

Asp Arg Val Gly Val Gln Pro Gly Asn Ser Arg Val Trp Gln Gly Thr
500 505 510

Met Glu Lys Ala Gly Leu Ala Trp Thr Arg Gly Thr Gly Val Gln Ser
515 520 525

Glu Gly Thr Trp Glu Ser Gln Arg Gln Asp Ser Asp Ala Leu Pro Ser
530 535 540

Pro Glu Leu Leu Pro Gln Asp Pro Asp Lys Pro Phe Leu Arg Lys Ala
545 550 555 560

Cys Ser Pro Ser Asn Ile Pro Ala Val Ile Ile Thr Asp Met Gly Thr
565 570 575

Gln Glu Asp Gly Ala Leu Glu Glu Thr Gln Gly Ser Pro Arg Gly Asn
580 585 590

Leu	Pro	Leu	Arg	Lys	Leu	Ser	Ser	Ser	Ala	Ser	Ser	Thr	Gly	Phe	
595						600				605					
Ser	Ser	Ser	Tyr	Glu	Asp	Ser	Glu	Glu	Asp	Ile	Ser	Ser	Asp	Pro	Glu
610						615				620					
Arg	Thr	Leu	Asp	Pro	Asn	Ser	Ala	Phe	Leu	His	Thr	Leu	Asp	Gln	Gln
625				630						635				640	
Lys	Pro	Arg	Val	Lys	Tyr	Arg	Thr	Ile	Trp	Lys	Val	Lys	Asn	Lys	Glu
				645				650						655	
Arg	Glu	Ser	Ser	Pro	Gly	Asn	Ala	Ser	Leu	Leu	Leu	Ile	Pro	Val	Thr
		660						665				670			
Ala	Ala	Thr	Gly	Ile	Arg	Val	Leu	Gly	Leu	Gly	Leu	Gly	Asp	Leu	Gly
		675				680						685			
Glu	Ile	Pro	Val	Tyr	Thr	Trp	Leu	Ala	Ser	Ser	Leu	Lys	Asn	Gly	Glu
690						695				700					
Ser	Lys	Cys	Asp	Leu	Met	Glu	Trp	Tyr	Cys	Tyr	Thr	Val	Lys	His	Pro
705				710						715				720	
Gly	Ser	Leu	Glu	Leu	His	Gly	Leu	Arg	Met	Ser	Pro	Thr	Gly	Thr	Ser
				725				730						735	
Cys	Cys	Gly	Leu	Ile	Met	Ser	Ala	Pro	Lys	Gln	Glu	Leu	Asn	Ala	Ile
		740				745						750			
Glu	Leu	Ser	Tyr	Leu	Pro	Pro	Ala	Pro	Ile	Val	Val	Val	Arg	Lys	Ser
		755				760						765			
Gly	Phe	Ser	Ala	Gln	Gln	Ser	Ala	Trp	Asp	Cys	Ile	Lys	Pro	Ser	Ser
770						775				780					
Pro	Ile	Arg	Asp	Arg	Val	Ala	Leu	Leu	Cys	Pro	Met	Gly	Phe	Lys	Ala
785				790						795				800	
Lys	Gly	Leu	Tyr	Glu	Ser	Cys	Leu	Trp	His	Ser	Pro	Glu	Ser	Ser	Gly
				805				810						815	
Ile	Arg	Gln	Lys	Gln	Cys	Cys	Ala	Ala	Leu	Ser	Trp	Ala	Leu	Lys	Gly
		820				825						830			
Lys	Arg	Glu	Tyr	Leu	Gln	Gln	Tyr	Ser	Gly	Trp	Met	Trp	Val	Pro	Gly
		835				840						845			

Leu Leu Ile Leu Gly Leu Gly Leu Ser Glu Ile His Arg Ser Ser Leu
 850 855 860
 Gln Val Gln Pro Ala Gly Gly Val His Thr Glu Ala Ala Ala Pro Gly
 865 870 875 880
 Ala Pro Gly His Gln Gly Ala Met Ser Val Thr Tyr Asp Ala Leu Arg
 885 890 895
 Glu Lys Gln Gln Leu Ser Lys Val Gly Asp Leu Pro Ala Leu Thr Trp
 900 905 910
 Pro Gly Pro Leu Ile Ser Gln Met Pro Gly Val Leu Asp Ser Cys Arg
 915 920 925
 Leu Cys Ser Leu Gly Asp Ile Glu Lys Ser Lys Ser Trp Arg Lys Ile
 930 935 940
 Lys Asn Met Val His Trp Ser Pro Phe Val Met Ser Phe Lys Lys Lys
 945 950 955 960
 Tyr Pro Trp Ile Gln Leu Ala Gly His Ala Gly Ser Phe Lys Ala Ala
 965 970 975
 Ala Asn Gly Arg Ile Leu Lys Lys His Cys Glu Ser Glu Gln Arg Cys
 980 985 990
 Leu Asp Arg Leu Met Val Asp Val Leu Arg Pro Phe Val Pro Ala Tyr
 995 1000 1005
 His Gly Asp Val Val Lys Asp Gly Glu Arg Tyr Asn Gln Met Asp Asp
 1010 1015 1020
 Leu Leu Ala Asp Phe Asp Ser Pro Cys Val Met Asp Cys Lys Met Gly
 1025 1030 1035 1040
 Ile Arg Gln Gln Gln Asp Phe Ala Gly Asp His Met Glu Asn Asn Pro
 1045 1050 1055
 Ser Gly Val His Ser Asp Leu Ala Lys Lys Ala Gly Glu Cys Gly Glu
 1060 1065 1070
 Gly Leu Ser Leu Thr Phe Leu Trp Ala Ser Arg Pro Thr Ile Gln Leu
 1075 1080 1085
 Ala Pro Pro Val Asp Ile Ser Pro Gln Pro Leu Ser Ser Pro Gly Gln
 1090 1095 1100

Thr Tyr Leu Glu Glu Glu Leu Thr Lys Ala Arg Lys Lys Pro Ser Leu
 1105 1110 1115 1120

Arg Lys Asp Met Tyr Gln Lys Met Ile Glu Val Asp Pro Glu Ala Pro
 1125 1130 1135

Thr Glu Glu Glu Lys Ala Gln Arg Ala Val Thr Lys Pro Arg Tyr Met
 1140 1145 1150

Gln Trp Arg Glu Thr Ile Ser Ser Thr Ala Thr Leu Gly Phe Arg Ile
 1155 1160 1165

Glu Gly Ile Lys Leu Arg Gly Ser Ala Trp Gly Ala Leu Pro Thr Ala
 1170 1175 1180

Pro Gly Ser Arg Pro Leu Leu His Pro Gly Leu Leu Pro Gln Pro Gln
 1185 1190 1195 1200

Val Leu Pro Val Leu Ser Lys Ala Ala Thr Lys Glu Asp Gly Thr Val
 1205 1210 1215

Asn Arg Asp Phe Lys Lys Thr Lys Thr Arg Glu Gln Val Thr Glu Ala
 1220 1225 1230

Phe Arg Glu Phe Thr Lys Gly Asn His Asn Ile Leu Ile Ala Tyr Arg
 1235 1240 1245

Asp Arg Leu Lys Ala Ile Arg Thr Thr Leu Glu Val Ser Pro Phe Phe
 1250 1255 1260

Lys Cys His Glu Val Ile Gly Ser Ser Leu Leu Phe Ile His Asp Lys
 1265 1270 1275 1280

Lys Glu Gln Ala Lys Val Trp Met Ile Asp Phe Gly Lys Thr Thr Pro
 1285 1290 1295

Leu Pro Glu Gly Gln Thr Leu Gln His Asp Val Pro Trp Gln Glu Gly
 1300 1305 1310

Asn Arg Glu Asp Gly Tyr Leu Ser Gly Leu Asn Asn Leu Val Asp Ile
 1315 1320 1325

Leu Thr Glu Met Ser Gln Asp Ala Pro Leu Ala
 1330 1335